# The Pacific Coast Architect

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**THE PACIFIC COAST ARCHITECT**

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## EDITORIAL

### Europe's Cataclysm Will Help Business

Although incomparable with any event in past history, the great conflict now raging on the European battlefields, while practically putting all business at a standstill in Europe, will offer great opportunities to American business, rather then effecting any result to the contrary. This truth is now pretty well accepted by hard-headed business men of this country and already steps of great magnitude have been taken with a view to taking advantage of the opportunities thus thrust upon us.

This question of what will happen to American business, in the face of the war, has been pretty carefully gone over during the past weeks. It has been discussed from every angle, in the press and out of it. There has been a gradual sifting down of the fundamentals involved until to-day, when there is some certainty of getting at the real truth in the situation. An overwhelming majority see naught but good in the situation—an advantage that will more than discount any harm to business.

There is apparent, however, somewhat of a tendency on the part of bankers to be more conservative than ordinarily. It is claimed by some people that the tightness of the money market has effectively stopped all investments and has particularly hurt the building world. This may be true in certain localities; but in certain localities only, and is a situation that will right itself shortly.

The Secretary of the Treasury has gone after those bankers who are attempting to hoard money in aggressive manner. Results have been immediate.

Taken by and large and there is but a single outlook, and that is unlimited opportunities for American business.

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### Architectural Masterpieces Destroyed

Destruction of a multitude of towns and villages, containing priceless works of art and masterpieces of architecture, on the European battlefields, is but another resultant phase illustrative of the tearing down of all those things which we have been taught to be the best in life and civilization—a complete wiping out of all that represents higher civilization by the war-maddened hordes.

Great cities of France, Germany, Austria and Belgium have all suffered the loss of historic cathedrals, museums, sculpture and architecture, representing the heritage of the past and the inspiration for many of the most famous works of the present day.

Reports from the headquarters of the warring nations would have you believe they were attempting to respect historic monuments, but let such monuments offer a possible strategic stronghold and all "respect" vanishes into thin air; the greatest of cathedrals and monumental buildings have already been used as fortresses under actual fire.

Similar losses of the past, that were slight as compared with the present terrible and wanton destruction, have brought forth loud wails from civilized mankind, but such an appeal would now go unheard. The best we can do is to hope for the preservation of as much of the art of Europe as fortunate circumstances will allow. This, however, and, in any event, gives out but little satisfaction.

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### Western Home for Woodrow Wilson

Plans for the construction of a magnificent summer home for the President of the United States, to be located among the foothills of the Rocky Mountains, some miles west of Denver, Colo., have been completed.

The building proper will cost about $60,000, but this is a minor part of the entire plans, for it is proposed to construct magnificent approaches to the castle on the hill, entailing an expenditure of perhaps $200,000.

John Brisben Walker, owner of a magnificent estate in the above section, has donated the land which has been accepted by the Government, after years of advocacy of such a plan by the land owner.

It is announced that President Wilson has consented to lay the cornerstone for this summer home. Mr. Walker has already done enough preliminary work on the foundations to permit the performance of this ceremony at any time. The stress of present political and diplomatic activity at Washington has precluded the possibility naming this date now.

The exact site of the new summer home is at Mt. Falcon, fifteen miles west of Denver, as the crow flies, in a most picturesque setting. Mt. Falcon rises several hundred feet above Denver and is just midway between that city and the great Continental Divide. From this site there is a splendid view of the Rockies to the west, while to the east the great plains sweep below.

This enterprise will certainly commend itself to the people of the West. It offers a possible architectural landmark.

### Legal Restrictions Upon Buildings

Suggested by the discussion that has been going on in Architectural Journals of late looking to greater harmony between the building ordinances of the various cities, the matter of legal restrictions upon the building of public and semi-public buildings outside of cities is worthy of consideration.

It is a notorious fact that the hotels in particular throughout the country in towns not large enough to support an organized department of building inspection are built entirely without regard to the safety of occupants; the same is true of theatres and lodge buildings and to some extent of schools.

The various State Legislatures could far better devote a share of their time to the formation of a code of minimum requirements intended to conserve life and property in the building of hotels, theatres and places of public assembly in unincorporated towns and cities than in the working out of "newfangled" methods of re-electing themselves.

It is hoped that when the Legislatures do wake up to the propriety and necessity of this line of action that they will do so in temperance and not attempt to provide text books on building construction as seems to be the tendency of ordinance tinkers of city governments at the present time. A code of minimum requirements is all that should be attempted and anything more than this in any building code whether for city, town, or country is not only superfluous but foolish.

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### Moore's Statement Silences Rumor

There have been numerous reports to the effect that the Panama-Pacific International Exposition, because of the war in Europe, would be postponed.

To offset this unfounded rumor, President Charles C. Moore of the Exposition, has issued a signed statement to the contrary, and further declaring that the war would not even affect the commercial or the educational importance, or the financial success of the exposition, in the slightest degree.

In clear-cut manner President Moore has told how the exposition will prosper despite the European conflict. He predicts that the war will be advantageous, rather than otherwise, as far as domestic participation in the exposition is concerned. As regards the latter phase, the effect of the European war seems likely to stimulate such participation in marked degree, as American manufacturers become impressed with the opportunity given by the exposition for bringing their goods to the attention of the large distributors of Central-South America, the Orient and Canada.

The exposition will open on its scheduled date, February 20, 1915. It will be completely ready when open. It is more than ninety per cent completed today. Nothing will be permitted to interfere with the consummation of the plans originally laid down.

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### San Francisco's Building Record

The Bureau of Building Inspection of the San Francisco Board of Public Works has prepared an interesting report showing what building construction has been carried on throughout the city and county since the fire of 1906.

Since May, 1906, to August 31, 1914, there were 51,864 buildings erected at an estimate cost of $257,920,309. This figure does not include construction of city railways, sewer work, street improvements and tunnels, and does not include work done by the United States Government in the construction of docks, schools, etc., or work undertaken by the State Board of Harbor Commissioners.

During the same period the report shows there were 173 Class "A" buildings erected at an expenditure of $33,287,654; 199 Class "B" buildings, at $14,679,186; 2,747 Class "C" buildings, at $81,741,818; 25,341 frames, at $96,333,536; 23, 335 alterations, at $18,240,175; sixty-one exposition buildings, at $9,360,277, and eight public buildings, at $4,277,663. Total, 51,864 buildings, at an estimate cost of $257,920,309.

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### Cuban Building at the P. P. I. E.

The Cuban Government has appropriated $250,000 for participation in the Panama-Pacific International Exposition. The Cuban pavilion will occupy a site 160 feet square between the Presidio gate and the Japanese temple. It will be of Spanish Renaissance architecture, and will be built on the lines of the beautiful Spanish-American hacienda residences. The building will be 117 by 144 feet in area, with towers 125 feet high. With the furnishings it will cost $100,000.

The central patio, always a distinctive feature of Spanish houses, will contain beautiful gardens and fountain effects, and will be provided with a band shell, where music will be provided for balls and receptions.

Architect Francisco J. Centurion, of Havana, and now located at 2256 Van Ness Avenue, San Francisco, the architect of the building, was the victor in a prize contest competed in by many Cuban designers.

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### Manila Takes Extensive Precautions

An ordinance providing that all buildings constructed in the city hereafter must be rat proof, has been passed by the municipal Board of Manila. The measure is for the purpose of safeguarding the public health against bubonic plague. Hollow walls and partitions are prohibited. Walls, with the exception of those of solid wood, must be of concrete, brick, stone, mortar, or other material that will keep out rats, to a height of one meter (3.28 feet), from the ground, and must extend below the surface of the ground at least twice the thickness of the wall. All hollow construction is forbidden except it be without apertures through which rats may pass and of materials through which they cannot make their way. For violation of the provisions of the ordinance a penalty is provided of a fine not exceeding $100 or imprisonment for not more than six months, or both.

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### Panama Canal Receives Scant Notice

Probably because of the more conspicuous attention paid to affairs in Europe at the present time, the opening of the Panama Canal to general commerce last month received comparatively scant space in the daily press and, as has been said, "the greatest engineering feat on the American continent has won its end and started momentous new channels of world-wide trade without great acclaim."

The canal is now in active operation for vessels drawing not more than thirty feet of water. War vessels of the fighting European nations as well as other foreign countries, will have full use of the canal, but under stricter regulations than the merchant marine.

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### Reinforced Brick Work.

The construction of curtain walls for steel frame structures underwent an improvement when reinforced brick work was employed in this position. When good cement mortar is used this type of work is the best extant today. Its cost is less than other forms and it more successfully meets the demands of fire and weather resisting qualities than other materials. Reinforced with vertical rods to resist lateral action gives these walls ample rigidity for all purposes.

# Description of St. Ignatius Church

BY CLARENCE P. KANE

With the dedication by His Grace, the Most Reverend Archbishop Riordan, in August, of the new St. Ignatius Church, on Fulton Street and Parker Avenue, San Francisco, this magnificent edifice has been the subject of much interest throughout the country. This splendid design was conceived by Architect Mr. Charles J. I. Devlin, whose offices are in the Pacific Building, and to him the highest credit is due for work of the finest example in every detail.

This church will stand as a monument for ages and as a tribute to the present generation. San Francisco Catholics indeed have raised to the honor of God a splendid church, in which the various branches of art are a witness to the genius of man.

The first object to attract the attention of the ocean voyager approaching San Francisco from the north or south or the distant Orient is this beautiful pile of Italian Renaissance with its two massive towers reaching toward the sky. When these towers and the dome, which rises to almost equal height, and crosses thereon are illuminated by electric lights, the object that first greets the voyager and bids him welcome to the City of St. Francis will be visible by night as well as by day. The church, which stands on an elevation, at the high point, of 540 feet from the city base, also presents from nearly every portion of San Francisco and from the trans-bay cities an equally majestic appearance.

To make a brief study of the completed structure from an architectural standpoint would be next to impossible; the work is too great. One has only to gaze upon the splendidly carved wood work, upon the stucco work, the apse and arch and architrave; let him wonder at the mellow light diffused throughout the immense building, falling upon stately columns and throwing out in glorious nuances of light and shade the capitals and cornices and moldings above.

The view of the auditorium presented to the priest as he turns at the altar toward the congregation and looks down the nave, 190 feet long, is a feast for the eye—the glorious perspective, the graceful and slender arches, the mellow shadings of the recesses in which are installed altars and confessionals; and if one of the doors on Fulton Street chances to be open, a wonderful picture of green, waving tree tops from the park, a glimpse of the distant hills, in the kaleidoscopic view of many-colored houses scattered in between.

Behind the delicate lace-work of plaster, which catches the wandering eye of the observer who surveys the swelling curve of the apse, is the triforium. Here the Fathers, the Scholastics or the Brothers may attend services unobserved. It consists of a passage way running the full curve of the apse with a continuous kneeling board below and an elbow shelf at the proper height. Here the kneeling Scholastic may look through the lattice down upon the altar and out upon the whole splendid vista of the church.

On the same floor there are large store rooms with an elevator going down to a hall near the sacristy.

Standing in the parapet on the tower a magnificent panorama is unfolded to the beholder. The city of San Francisco is spread out in full detail, bordered by blue waters and encircled by hills; on one side little aquarelles of San Francisco Bay; on the other, the expanse of the great Pacific, which loses itself in the horizon.

Approaching the church from the north, on the side of Parker Avenue, one is impressed by the magnificence of it all. The dome, which swells its glittering and graceful form in the sun, is supported by immense Corinthian columns. Between the columns marble-trimmed panels of great beauty are conspicuous for the delicate appropriateness. Upon nearer approach is seen the long colonnade of fluted columns and arches.

A survey of the facade from the Fulton Street side shows a lower order in the Ionic style, and an upper order in the Corinthian style of architecture. The fourteen columns with Italian Renaissance caps support a cornice that runs from tower to tower, and this ends in a balustrade of fancy proportions. Back of the balustrade there rises another row of columns, Corinthian in style, supporting a projected pediment and crowned by a lantern of exceptional beauty.

The building is located on the northeast corner of Fulton Street and Parker Avenue, occupying 154 feet on the Fulton Street front by 263 feet on Parker Avenue.

There are five principal subdivisions of auditorium consisting of the nave, 60 by 150 feet; east and west aisles, 24 by 150 feet, and sixteen side altar bays, 16 feet square.

Granite steps, 56 feet in width, lead to the front portico which is 12 by 70 feet. The sanctuary is 60 feet by 62 feet, semi-circular, and is flanked by two altar bays, 20 by 24 feet. The sanctuary is mounted by a dome 50 feet in diameter, which stands 152 feet above the grade. Back of the sanctuary there is a series of sacristies and rooms for vestments. The height of the auditorium is 74 feet; the sanctuary is 66 feet high; east and west aisles 40 feet high, and the side altar bays 22 feet high.

The east and west towers reach to a height of 213 feet above the high point of grade.

The building receives natural lighting from eighteen windows in the clere story and also from eighteen circular windows in the east and west aisles.

Standing on the east side of the church there is a campanile 18 feet square, 150 feet above the high point of grade. The bell mounted thereon is an old relic of San Francisco. It was previously used by St. Ignatius Church, then located at Van Ness Avenue and Hayes Street, and prior to that time on the old Emporium site, by the same church. It weighs 6,000 pounds.

The vestibule and portico of the church have marble floors. The wood work in the vestibule and baptistry is of mahogany, while the wood work in the balance of the church is white cedar.

The interiors of the auditorium and sanctuary are in cast and run plaster, a magnificent piece of work by A. Knowles, 985 Folsom Street. The plaster decorations have been pronounced a work of art.

The church will seat 1,700 people in the auditorium and 300 in the gallery.

A remarkable feature of the furnishings is the pews. Each pew has an apparatus which admits heat in the cold season or cools the atmosphere in hot weather. R. Brandelin & Co., San Francisco, manufactured and installed all seating.

From his seat the observer will notice that there is a somewhat unusual level of the altar floor. From any part of the church the priest may be distinctly seen.

The music from the organ and choir will fall in pleasing cadences upon the ear of the worshiper, for the sound will come from a height where arches and cornices have ceased, and with nothing to intervene, it will reach the listener full toned and with uninterrupted force.

The exterior walls are of brick and the decorative features have been brought out largely in terra-cotta on the main portion and clere story of the building. As an ex-

ample of brick work the church is well worth a visit. All the material used in this line came from the plant of N. Clark & Sons. The regularity and fineness of the joining, combined with the apparent solidity of the walls, show careful and watchful workmanship.

Molded and enriched brick work has been freely used on the arches and panels of the main walls, on the ground and upper stories and also on the walls of the dome. These enriched bricks are of varied design and give a fitting touch to the delicate detail of the building.

A strong effect has also been gained by the columns of the main entrance. These columns are of terra-cotta and stand massive and free at the top of the flight of stairs leading to the portico. There, in the portico, a group of five doorways make an interesting study. These doorways are arched and constructed with terra-cotta, as also are the piers from which these arches spring.

On Parker Avenue there is also a colonnade effect obtained on the lower walls by the use of engaged columns. These columns, like those on the front, are large and massive. The fluting and entasis of the columns are in keeping with the care taken in handling the detail of the building.

The side entrance, between two of the columns on Parker Avenue, is a fine example of detail carried out in terra-cotta. This doorway, with its plain molded jambs and lintel surmounted by an enriched cornice and cartouche, is very effective. The cartouche is delicately molded with a wreath and cross design. Two figures form the flanks on each side of the cartouche.

On the clere story a rich effect is gained by a series of arches of terra-cotta over the windows with circular panels between.

These arches, which give an arcading effect all around the building, spring from caps on top of the paneled piers of the clere story. All the terra-cotta in this portion of the structure is richly decorated with well chosen ornaments. As before stated, all the brick and terra-cotta for this large edifice were furnished by N. Clark & Sons, and the utmost care was shown by this firm in carrying out the architect's details and instructions.

About one quarter million face brick were used in this building, including the molded and enriched brick.

The steel frame for the church was fabricated and erected by the Central Iron Works, of San Francisco. Mr. W. W. Breite was the engineer. One hundred tons of steel were used in the building.

The main auditorium of the church is heated and ventilated by the indirect plenum system, installed by Mangrum & Otter, under the direction of William E. Leland, consulting engineer.

The fresh air is drawn into the fanroom through a vertical shaft in the center of the companile and is delivered by the ventilating fan through a heating stack of vento radiation. From this point the warmed air is delivered to the auditorium through a system of galvanized iron ventilating ducts under the floor to register screens in the ends of the pews and through register screens in the alcoves on each side of the main auditorium.

Supplemental direct radiation is placed at the back of the auditorium near the entrance doors and in the sanctuary. There are also long steam coils placed at the level of the clere story windows on each side of the building.

Individual rooms in the building are heated by direct steam radiation.

The boiler and ventilating fan are located in an isolated boiler room outside of the main building.

Crude oil is used for fuel and is burned under the boiler by means of the Johnson low pressure oil burning system.

The many conditions, the many special requirements and the many architectural details had to be taken into consideration in the installation and laying out of the electrical equipment. In order to have a flexible, satisfactory and easily controlled lighting and power system, considerable work was required on the part of the Butte Engineering & Electric Company, which concern handled this end of the work. The installation consists primarily of a main service switchboard, on which all the main service switches are located, the various and main power switches, different feeder switches, the master remote control switches for controlling the east and west lower crosses, station lighting, general lighting and power meter.

Two phase, 220 volt alternating current, is provided for power, and single phase 110, 220 volt, for lighting. From this service board circuits are installed to the main controlled switchboard, located in the east vestry, to the panel boards in the organ loft, east and west towers, to the power house for heating and ventilating motors and to the various motors installed in the church building. All the lights within the church are controlled from the main switchboard and, no matter what lights are burning therein, one can tell at a glance which lamps are lit. In order to further simplify the operation of this main switchboard a complete floor plan, showing all the lights, is provided at this board.

The main interior lighting consists of direct illumination with the exception of the sanctuary which is further illuminated with concealed lighting placed in the sanctuary arch. The tower crosses are outlined with fifty-four eight candle-power lamps, each installed on the outer edge of the crosses. These crosses are eight feet in height.

The success of the building as a whole and the smoothness of operation during contruction was due to the complete set of plans, specifications and detail drawings prepared by the architect.

As an example, the electric wiring and illumination plans may be mentioned, which consisted of fifteen drawings, 33 inches by 44 inches, besides a number of small drawings. These drawings showed in detail all conduits, wires, pull boxes, switches, etc., and the sizes and exact location of same. All connections and unusual schemes of light control, etc., were shown diagrammatically, and all details, such as distributing panels, switchboards, indirect lighting and special switching devices, were shown in full size or large scale drawings.

The electrical and illuminating plans and specifications were prepared by Charles T. Phillips, consulting engineer. under the direction of the architect.

J. Looney, plumber, 85 City Hall Avenue, San Francisco, installed all plumbing in the new St. Ignatius Church, San Francisco. This installation has been generally reported as a most excellent piece of work.

Over 4,000 barrels of Santa Cruz Portland Cement were used in construction of foundations, etc., of the new St. Ignatius Church at Fulton Street and Parker Avenue, San Francisco. The specifications prepared by Architect Devlin, under which this cement was used, were very rigid, and required that each sack must contain ninety-four pounds of cement, in addition to the physical requirements as laid down by the American Society for the Testing of Materials. The firm of Robert W. Hunt & Company, San Francisco, testing engineers, was appointed by the architect to test all of the cement used in this work and to weigh each sack to make sure that the terms of the specifications were complied with. The Santa Cruz Portland Cement Company feels proud in saying that Santa Cruz Portland Cement was found in every way satisfactory to the architect.

The mill and cabinet work for the church was manufactured and installed by the Spencer Street Planing Mill, of this city.

The towers and metal railings were all sanded and colored to blend with the brick and terra-cotta dome, the towers and campanile. The balustrades were also sanded and colored. This work and all painting in the church was done by the J. Llewellyn Company, painters and decorators, 1635 Broadway, Oakland.

The Forderer Cornice Works, San Francisco, installed the roofing and all cornice work on the church. Three hundred boxes of 14-inch by 20-inch Target-and-Arrow roofing tin, manufactured by N. & G. Taylor Company, Philadelphia, were used on the job. The sheet metal contract amounted to $38,700—the largest ever let on the Pacific Coast.

W. P. Fuller & Co., San Francisco, furnished the glass for the church.

An unusual feature in the interior decoration will be the installation of magnificent paintings in the panels over the several altar bays. Professor Pietro Ridolfi, of Rome, has already forwarded a beautiful canvas, which, more or less, is a sample and gives some idea of how the paintings will appear. The drawing and color blend is fascinating.

Recently photographs have been received reproducing the entire set of paintings, and as these reproductions pass in review it becomes easy to imagine the splendid effect of the finished pictures and to value the art treasures at St. Ignatius Church. These paintings represent the well-known scenes in telling manner. The work of painting these pictures was awarded to Professor Ridolfi after five other artists had been considered, including two Americans, one Belgian and one German. The full set of paintings is now on its way from Rome.

It would be impossible to write about this church without mentioning the name of Father Trivelli, President of St. Ignatius University, and the priest in charge of the preparations for the building. Rarely has a priest been charged with a task so comprehensive and, at the same time, so difficult. For two years Father Trivelli has been at work familiarizing himself with the work in hand. He has been on the job almost constantly, supervising actual building. Father Trivelli is today receiving unstinted praise for his most important work in connection with the building of this beautiful structure.

St. Ignatius as a whole is distinctly a significant addition to architecture—a most notable achievement in recent ecclesiastical architecture. The precision and the finesse and attenuation of the work as a whole is on a well studied scale not only in proportion but in detail. It is rugged and refined and virile and massive, and yet not heavy. It is a delicate piece of work, and yet not trivial. It represents an heritage of all ages without being archaeological.

# Bonds of Brick Work

By NATHANIEL ELLERY, C. E.

Many people today still regard brick in building construction as simply so many units of burned clay placed or tied in the work with mortar for beds and joints. They think of it as ordinary work without appreciating the time and study devoted to it by architects and designers. The arrangement of the bricks has been given little thought except by the workers in this material and yet we find in brick the finest architectural successes. It lends itself to many combinations of color, texture and arrangement which gives ample latitude for artistic success.

Aside from the purely esthetic features of brick bonds, the structural value should not be overlooked. To obtain structurally sound brick work we must use stretchers and headers to bind the mass together and fundamentally, the English and Flemish bonds are the bases from which all ornamental and structural bonding is derived. Running bond or bricks laid lengthwise in a wall has inferior strength when compared to the other bonds or variation of those previously mentioned. In English bond we have a row of headers and then a row of stretchers the vertical joints of each kind are in alignment and the alternate headers are centered over the stretcher vertical joints while in Flemish bond there is in each row an alternate of headers and stretchers with each header centered vertically over the underlying stretcher. From these principal bonds we vary the arrangement and with different colors produce pattern brick work of many designs. This, with the various mortar joints, gives innumerable combinations. Now, if we move the alternate stretcher course of brick in English bond one-half length to break joint with the underlying stretcher course, there is obtained the English cross bond or Dutch bond, and again should the header course of English bond be placed as every third, fourth, fifth, etc., course, we have our common bond so often seen in blank walls of our buildings.

One of the simplest modifications of Flemish bond is by having two stretchers take the place of the one and thus simply acting as a double length of brick in this position, and again by inserting an alternate stretcher course we make another change in Flemish bond. Another simple change in this bond is by shifting each header one-half its width laterally as we progress in courses, so that the headers form a diagonal line. This is known as Flemish Spiral bond.

By shifting headers and stretchers and changing courses one can imagine the vast number of combinations possible. From Flemish bond as a base we derive most of the pattern work. In this, good, accurate workmanship is essential to bring out the best ideas of the architect and make the pattern work have the appearance dictated by the design.

Many times little attention is paid to the mortar joints and thus the full value of brick bonding is damaged just so much. There is no feature more necessary to complete a design than the proper joint. In color, size and depth of mortar joints there exists much chance for good or unsightly brick work. For the sake of strength all mortar should be of a liberal percentage of cement in order to give the strength of adhesion between the brick and the mortar.

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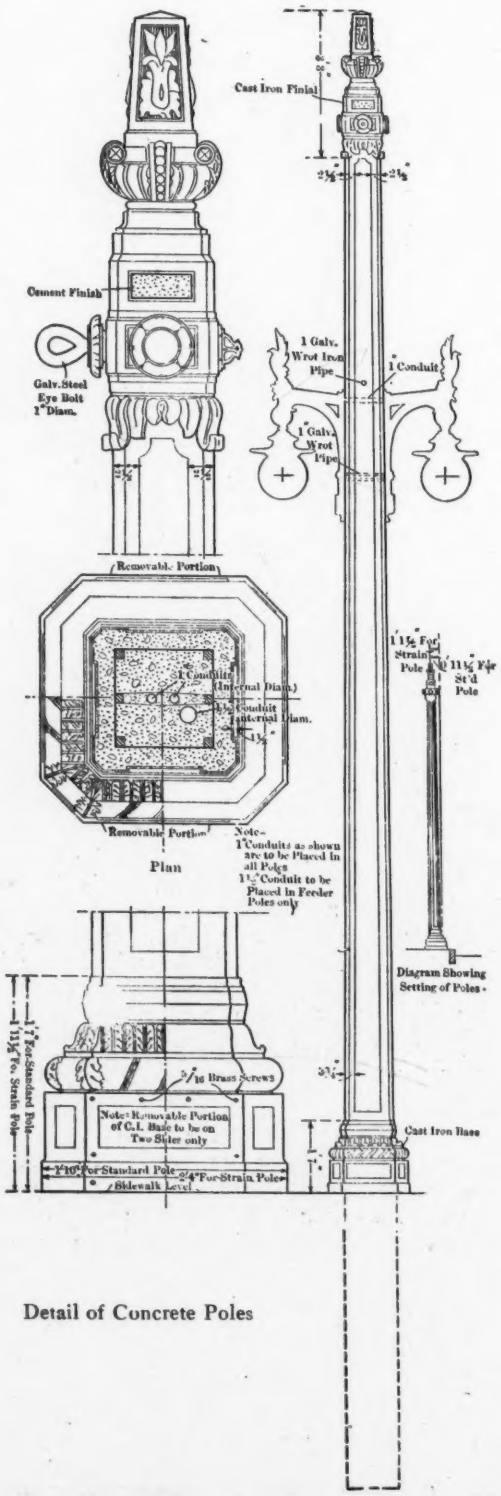
### Recent Legal Decision

A building contract permitted the owner to request alterations which should not void the contract, the amount of alterations to be added to or deducted from the contract price. It also provided that on the demand of either the contractor, owner or architect the value of all changes should be fixed in writing. The contract price was $16,000 and certain changes were made costing $130, the value of which was not fixed in writing, no demand therefor having been made by contractor, owner or architect. It was held that the surety on the contractor's bond was not released from liability because of such alterations.—Wolf v. Aetna Indemnity Co., California Supreme Court, 126 Pac. 470.

# Practicability of Concrete Poles

A great deal of interest has been shown in the erection and finishing of the trolley poles for the San Francisco Municipal Railway System.

The City Engineer's office made exhaustive investigations into the advisability and practicability of using an ornamental concrete pole in place of the regulation one of iron. The result of this investigation was the erection of upwards of 1,000 concrete poles. Of particular interest from an architectural standpoint are the ornamental poles erected on Van Ness Avenue.


Cast Iron Finial
Cement Finish
Galv. Steel Eye Bolt 1" Diam.
1 Galv. Wrot Iron Pipe
1" Conduit
1" Galv. Wrot Pipe
Removable Portion
1" Conduits (Internal Diam.)
1½" Conduit (Internal Diam.
Removable Portion
Note- 1" Conduits as shown are to be Placed in all Poles 1½" Conduit to be Placed in Feeder Poles only
Plan
1½" For Strain Pole
1½" For Std'd Pole
Diagram Showing Setting of Poles
1" For Standard Pole 1½" For Strain Pole
⅜" Brass Screws
Note- Removable Portion of C.I. Base to be on Two Sides only
1'-10" For Standard Pole 2'-4" For Strain Pole
Sidewalk Level
Cast Iron Base

Detail of Concrete Poles

There was great discussion as to whether the erection of poles would mar the natural beauties of the avenue, but the poles as completed blend in well with the general architectural and color tones of the avenue and are as nearly artistic as a trolley pole can be made.

The designing of the ornamental poles is the product of the city's Consulting Board of Architects, while the engineering details were worked out by J. R. Wood of the Engineering Department, who also designed the concrete poles for the other lines of the system—all of the work being under the supervision of M. M. O'Shaughnessy, City Engineer.

Great credit is due to the Engineer's office and the general contractor for the prompt execution of this work. Very often municipal work is allowed to lag, so that the prompt completion of the municipal railway system certainly reflects credit upon those engaged in its construction.

The following is a summary of the specifications used in the construction of the poles: Proportions of concrete: All concrete shall be composed of Portland cement, sand and broken rock, in the proportion of one cubic foot of cement, sand and broken rock, in the proportions of one cubic foot of cement, two cubic feet of sand and four cubic feet of broken rock. Portland cement finish. All the exposed surface shall be prepared by removing all loose material adhering thereto and by thoroughly washing with water, after which they shall be finished with cement mortar composed of one part Portland cement, one part Keystone sand and two parts of bank sand applied by means of a cement gun. Concrete paint: After the cement finish has been applied as specified above, all exposed concrete surfaces shall be painted with two coats of "Concreto" as manufactured by the Muralo Company, or some equivalent concrete paint.

The Muralo Company, for which Mr. A. L. Greene is the agent, supplied the "Concreto" cement coating for all the municipal railway trolley poles of the entire system. Two coats were applied to the Van Ness Avenue poles and two coats applied directly to the concrete on the other lines.

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### Urges National Type of U. S. Architecture

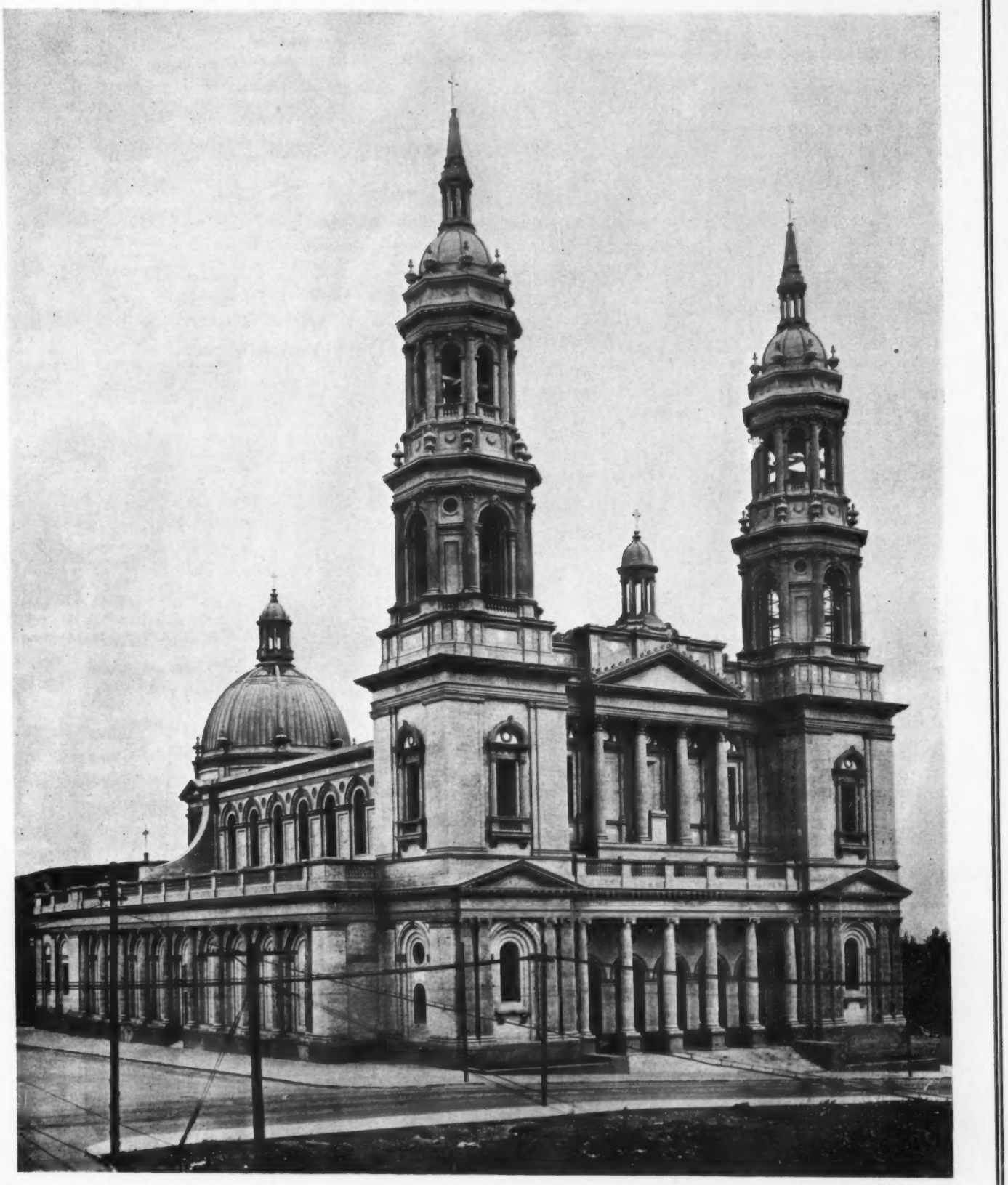
*Paris* — William Hunt Diedrich, a young American sculptor and architect, who has won fame after six years of work here in comparative obscurity, says:

"I have a number of commissions on hand now, but as soon as possible I intend to return to America.

"American architecture should be more emancipated. I have nothing to say against steel-work and sky-scrapers, for they are the natural outcome of the national requirements, but in almost every other respect American architecture is laboring under European traditions completely out of keeping with the American temperament. A Greek temple would look ridiculous in a country of pine trees.

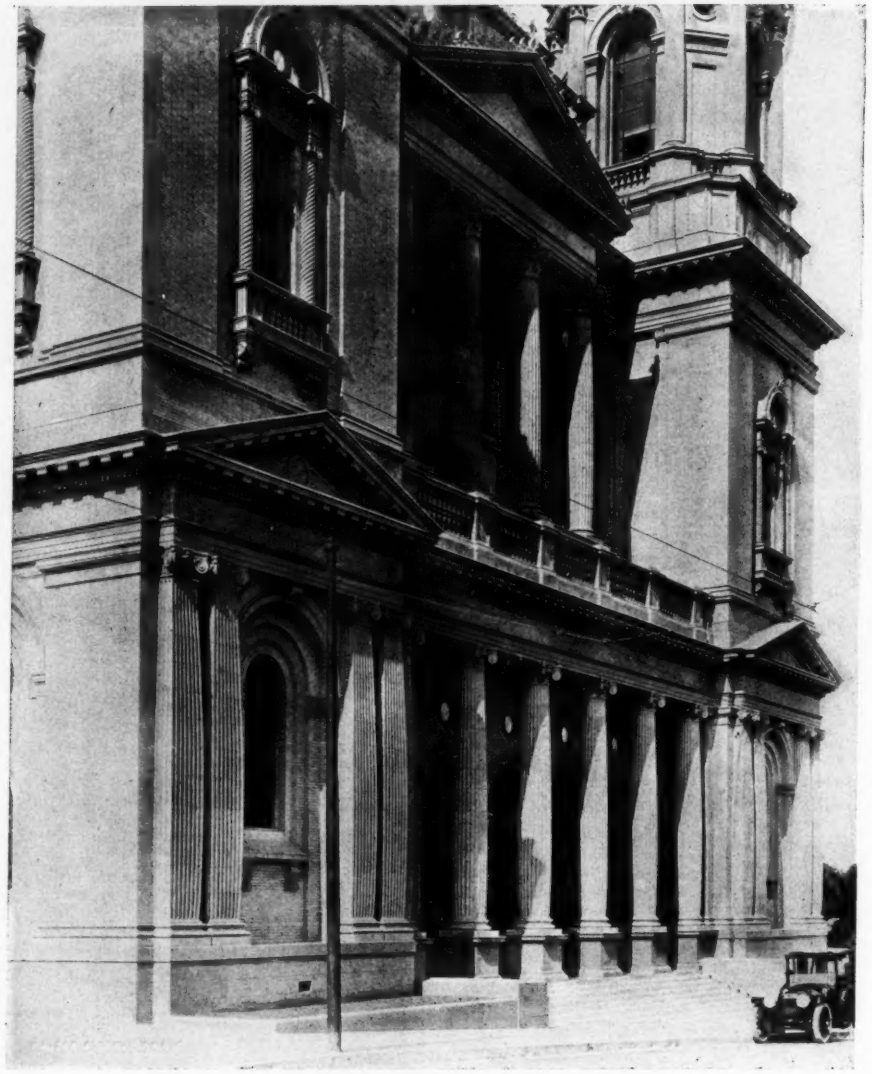
"America should develop a national style of architecture, inspired by American nature, as the Gothic and old Norman styles were suggested by the conditions of the countries and the temperament of the people who created them. The Southern States require a much more exotic style of architecture than they have at the present day."

Diedrich is a grandson of William Hunt of Boston, the artist decorator of the Albany Capital.

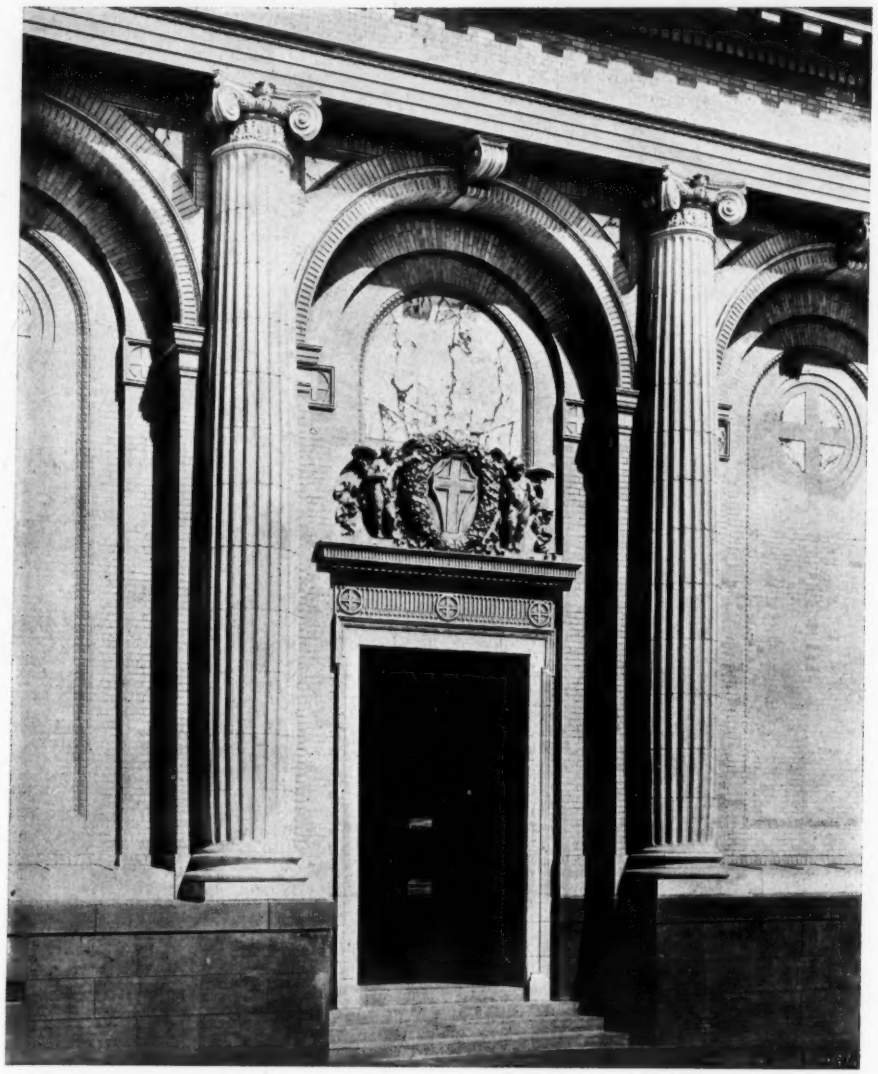


St. Ignatius Church, San Francisco. View from Southwest — Photo, Gabriel Moulin

Chas. J. I. Devlin, Architect, San Francisco

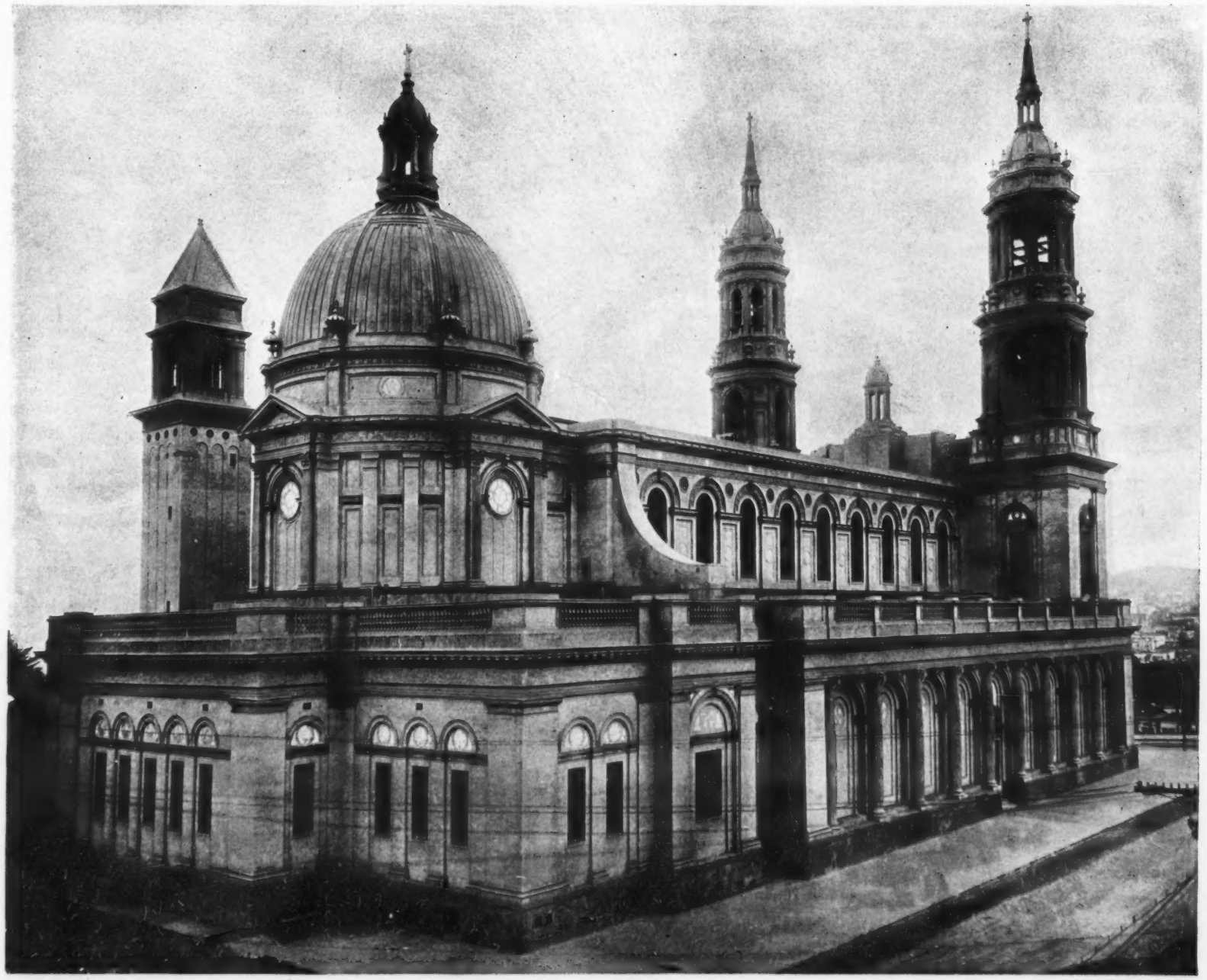


South Facade



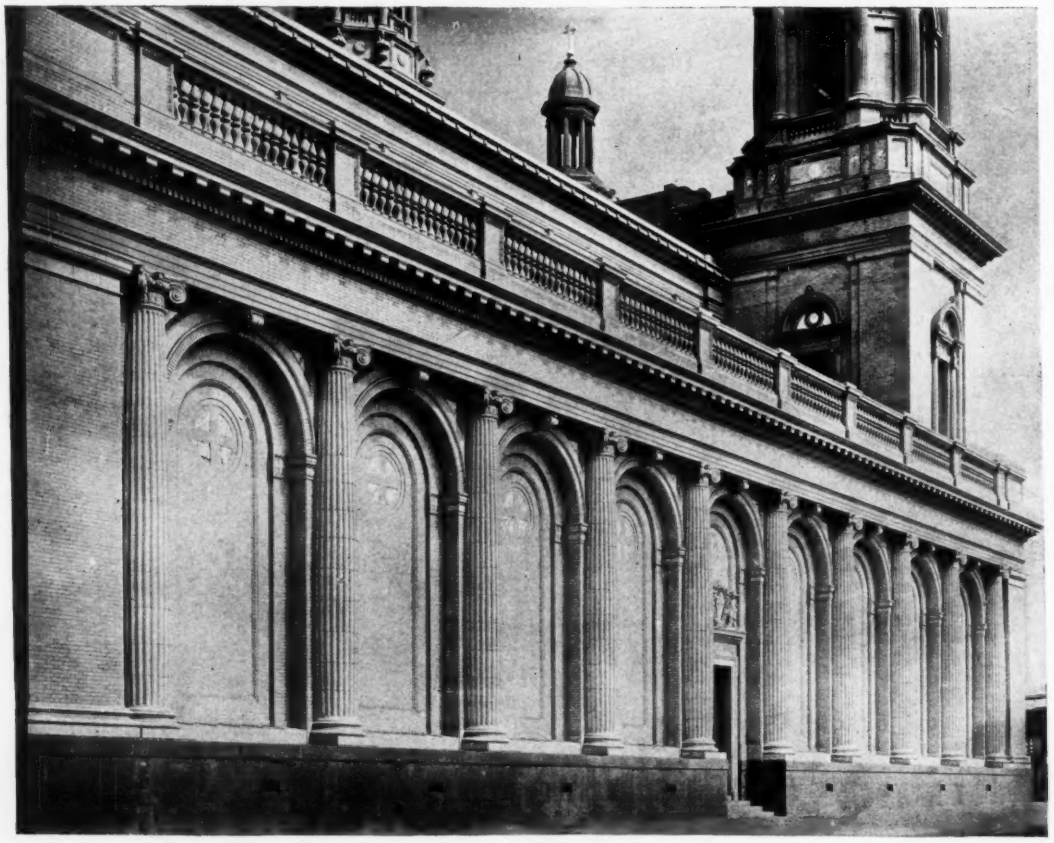
West Entrance

St. Ignatius Church, San Francisco
Chas. J. I. Devlin, Architect, San Francisco

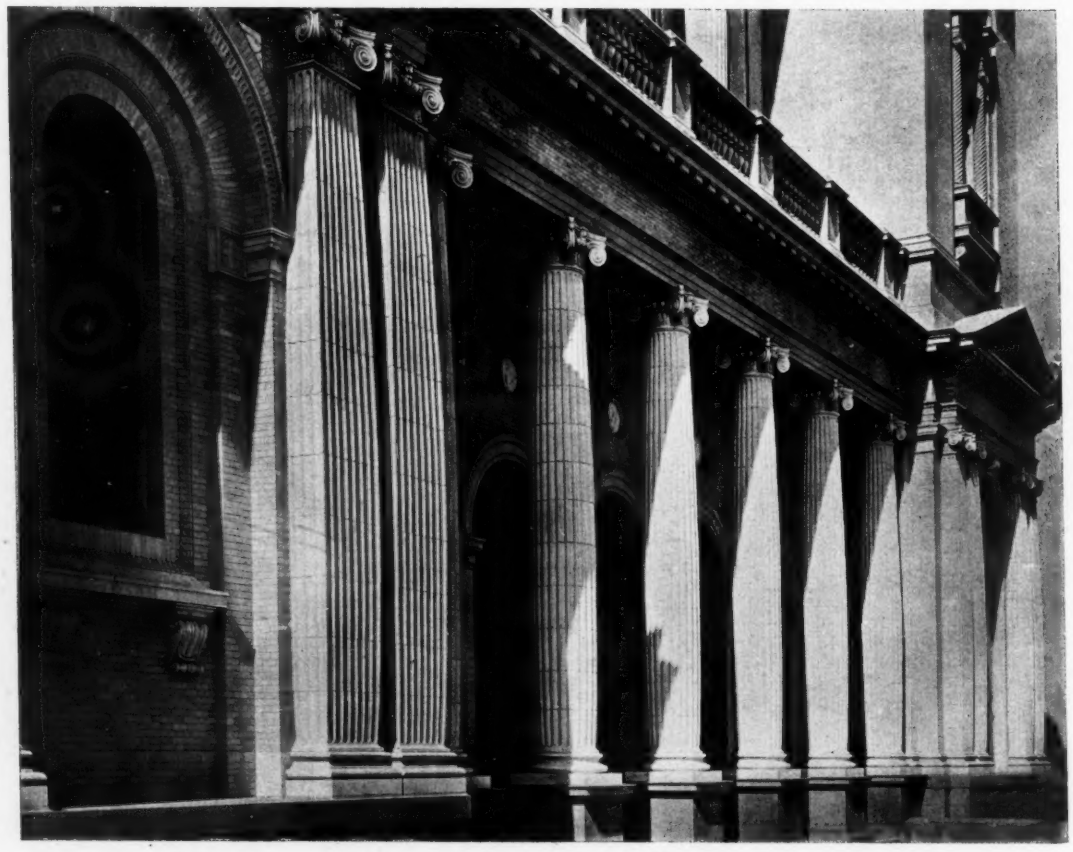


St. Ignatius Church, San Francisco. View from Northwest
Chas. J. I. Devlin, Architect, San Francisco

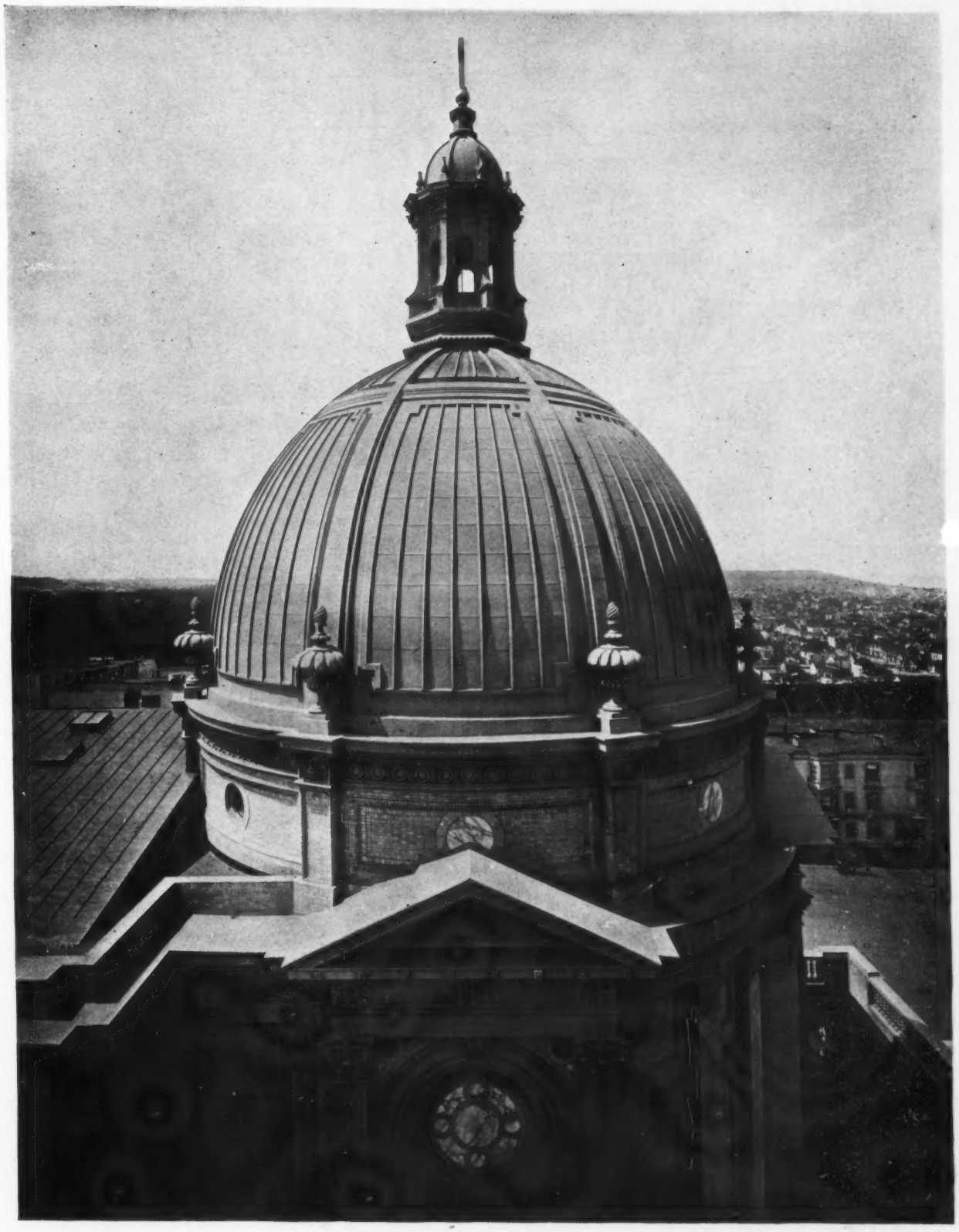
Photo, Gabriel Moulin



St. Ignatius Church, San Francisco. Parker Avenue Facade



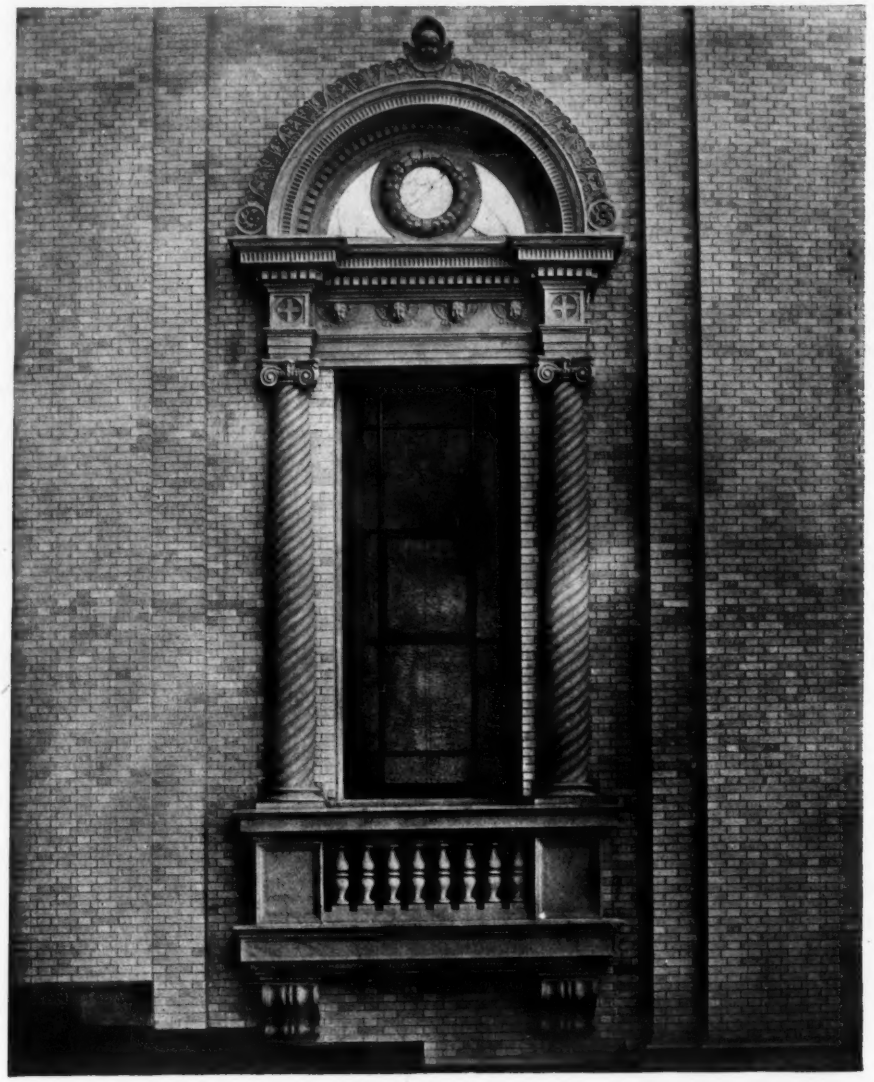
St. Ignatius Church, San Francisco. South Portico
Chas. J. I. Devlin, Architect, San Francisco



St. Ignatius Church, San Francisco. Dome
Chas. J. I. Devlin, Architect, San Francisco

Photo, Gabriel Moulin

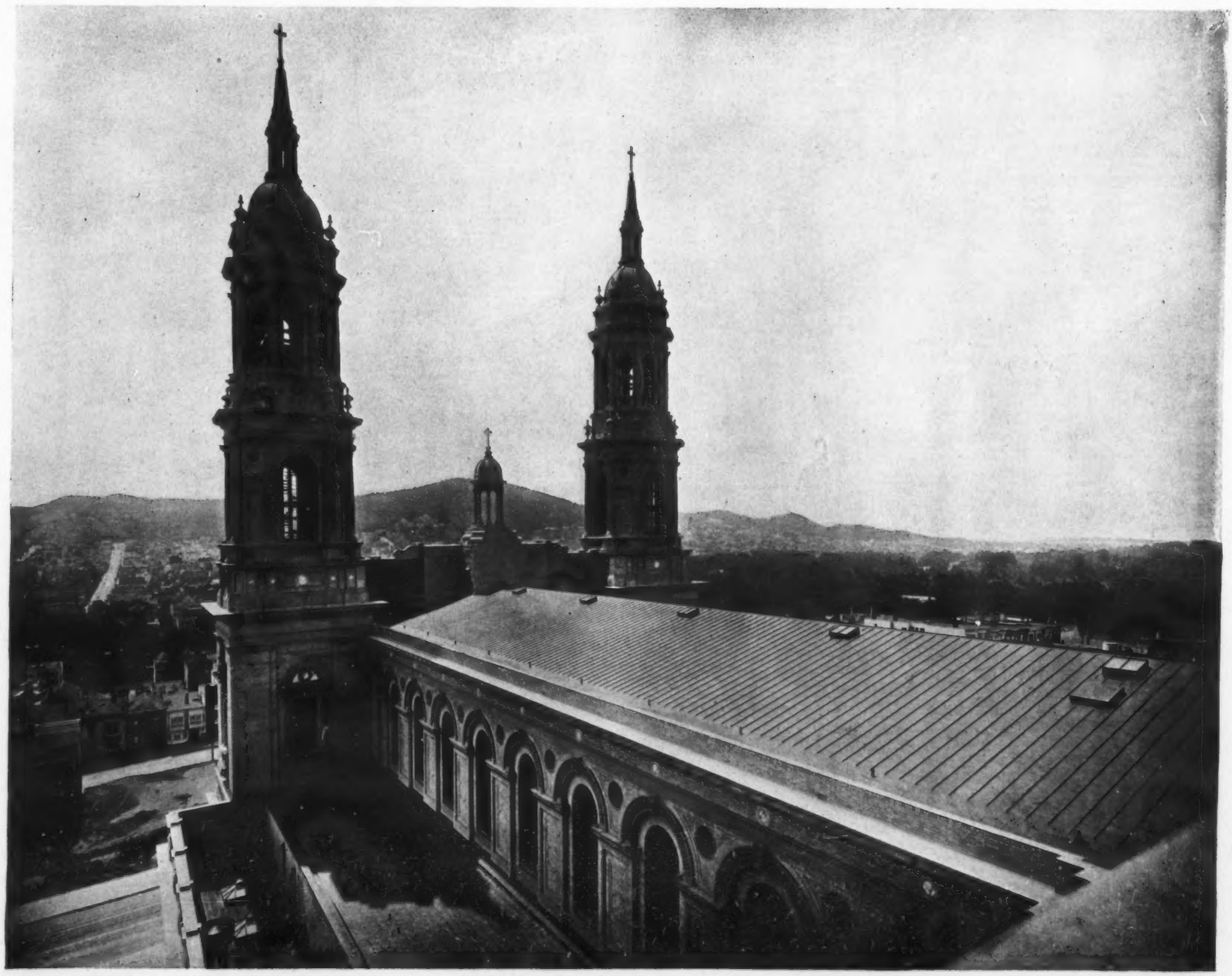
North View of East Tower



Photo, Gabriel Moulin

Second-Story Tower Window

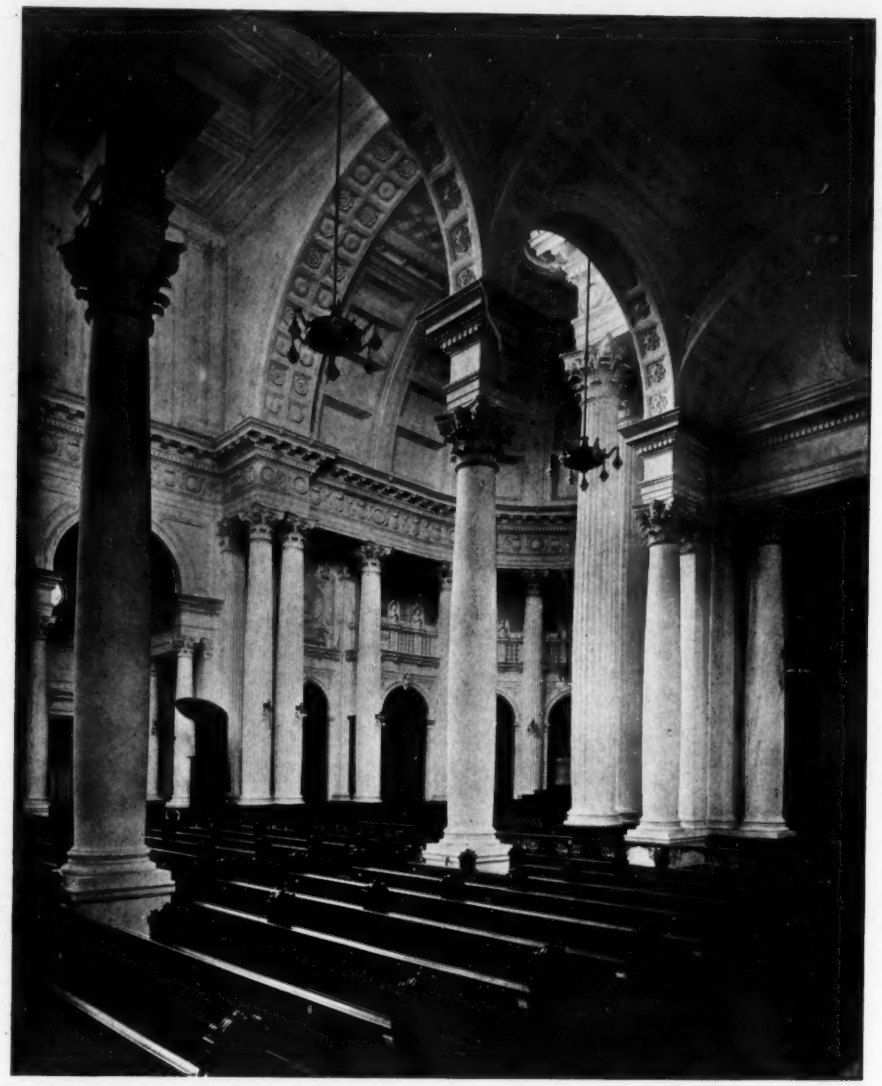
St. Ignatius Church, San Francisco
Chas. J. I. Devlin, Architect, San Francisco



St. Ignatius Church, San Francisco. Roof and Clere Story Detail

Photo, Gabriel Moulin

Chas. J. I. Devlin, Architect, San Francisco



Northwest View looking Toward Sanctuary

View of Gallery, Looking West

Photo, Gabriel Moulin

St. Ignatius Church, San Francisco

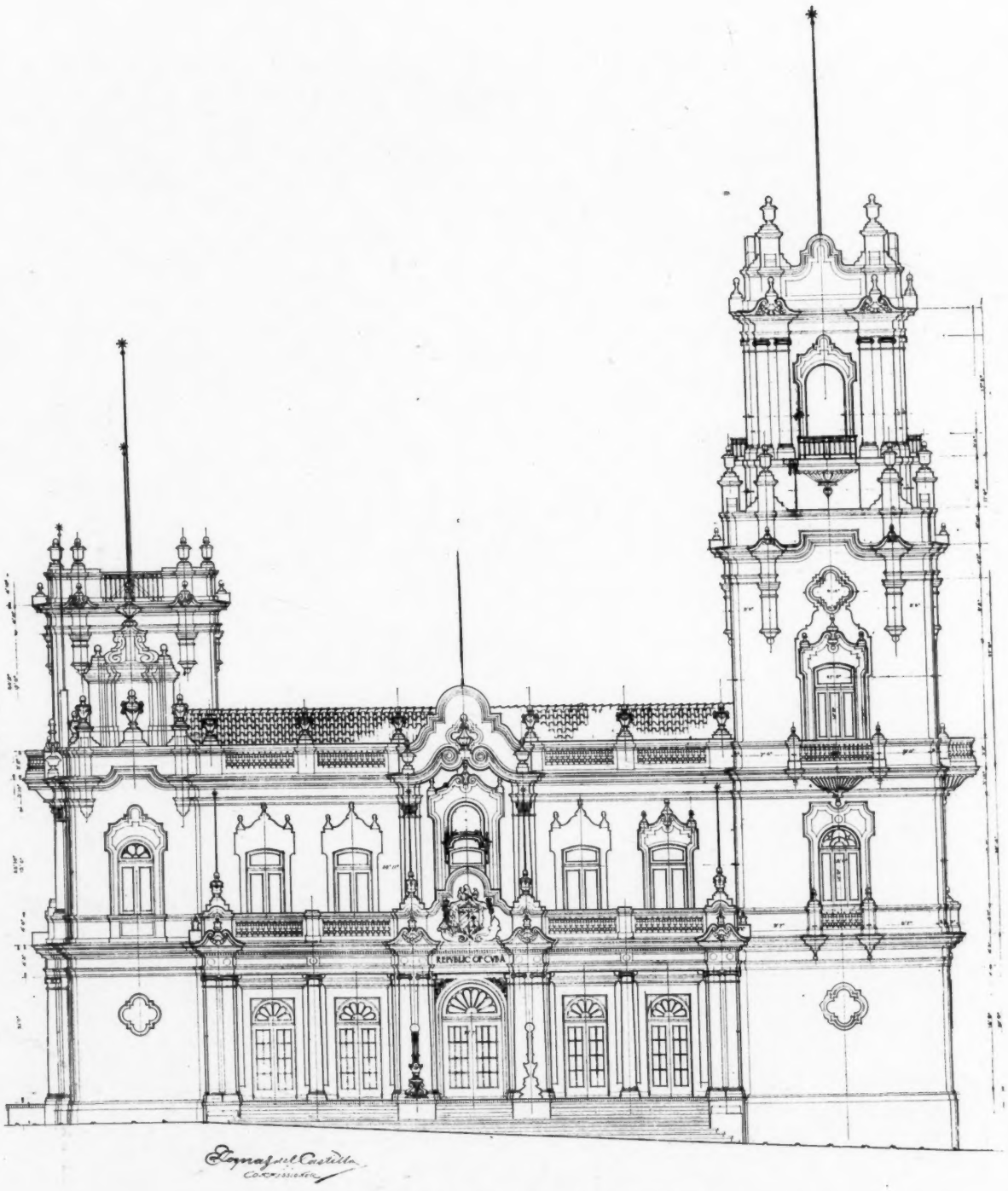
Chas. J. I. Devlin, Architect, San Francisco

Detail View of Sanctuary Doors

Photo, Gabriel Moulin

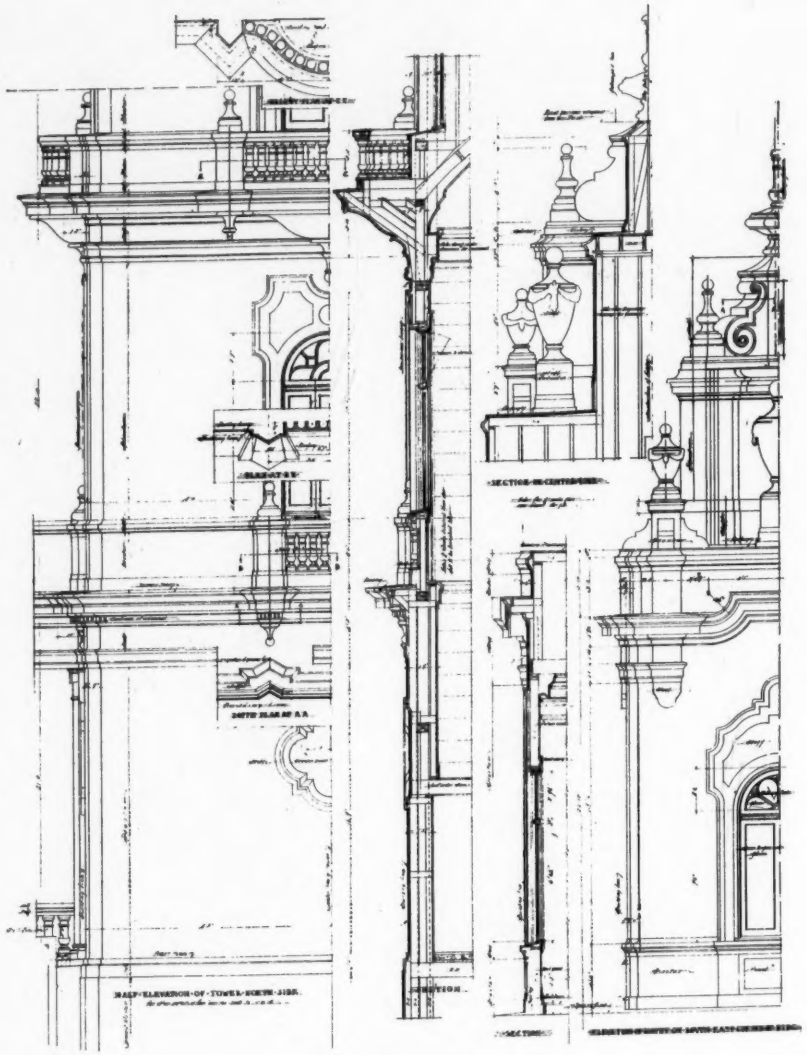
St. Ignatius Church, San Francisco. East Aisle looking toward Sanctuary

Chas. J. I. Devlin, Architect, San Francisco

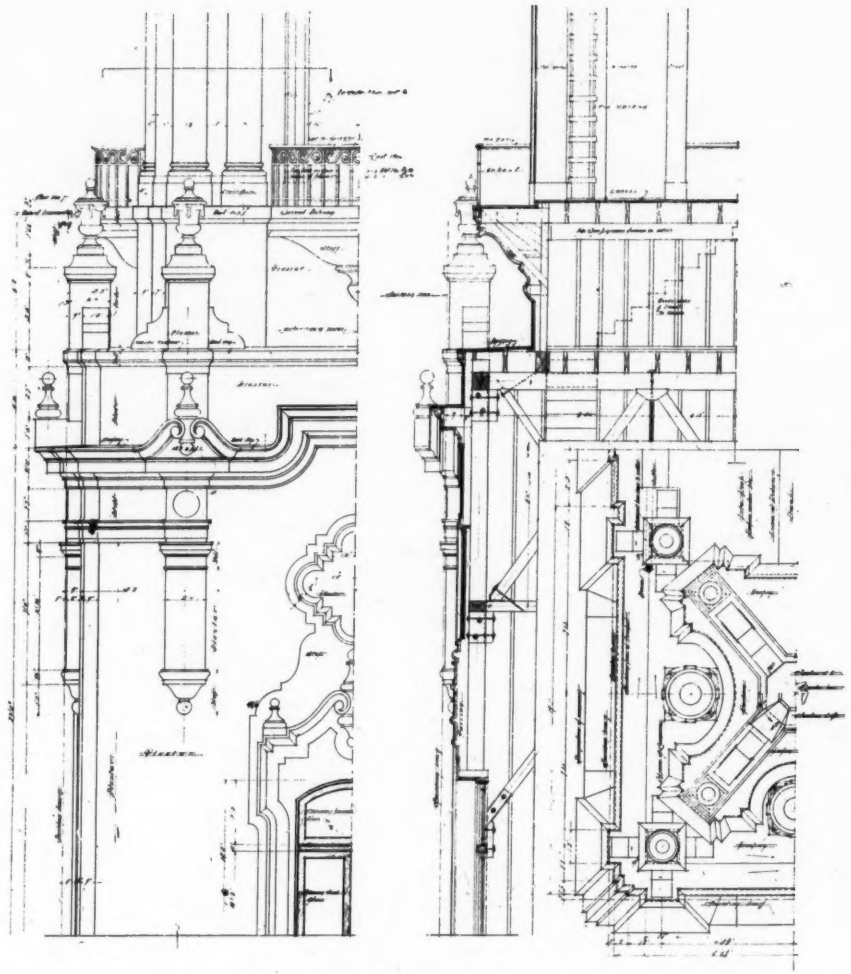



Cuban Building, P. P. I. E. East Elevation
Francisco J. Centurion, Architect, Havana, Cuba

Cuban Building, P. P. I. E.
Francisco J. Centurion, Architect, Havana, Cuba



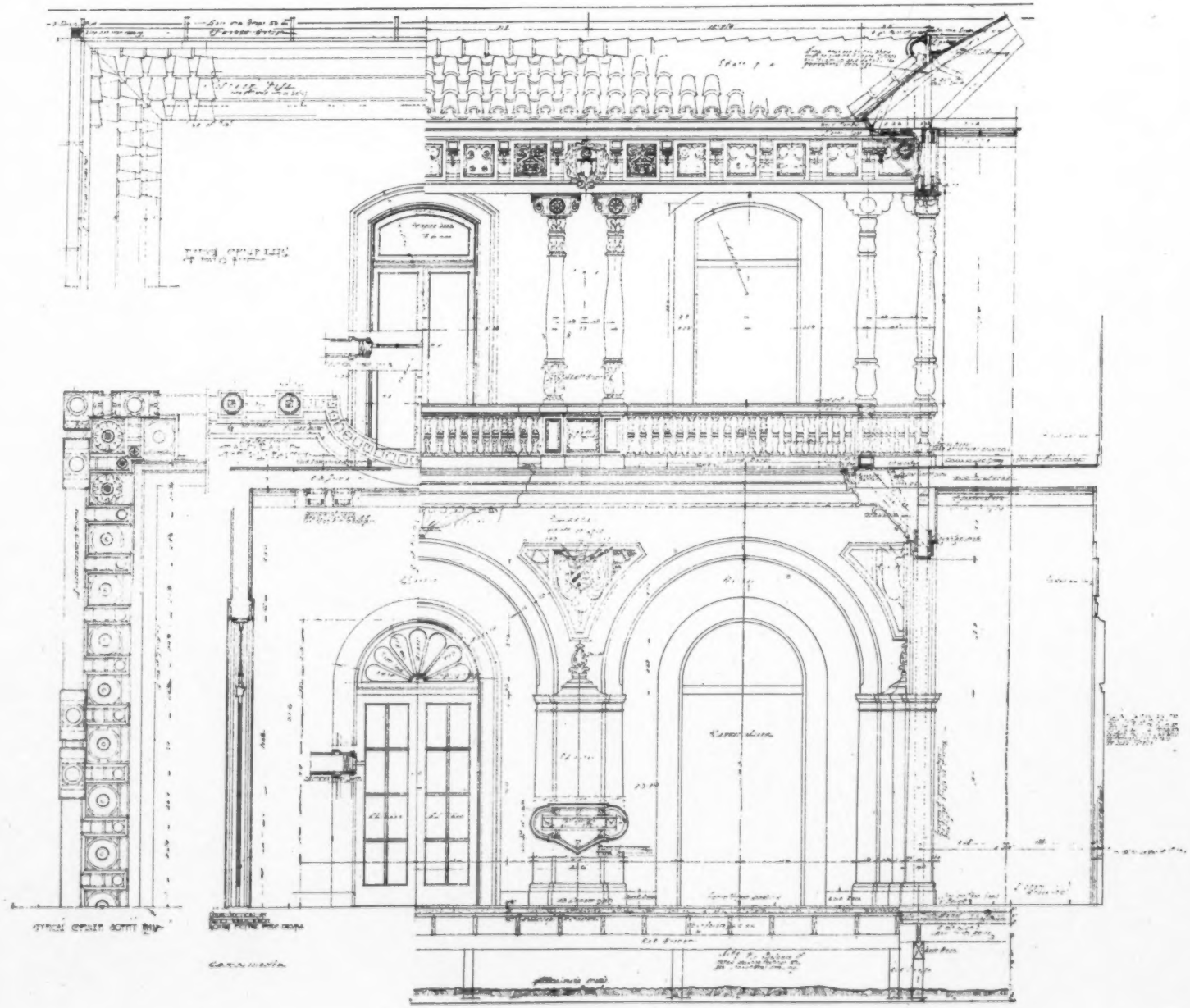
Main Tower Details



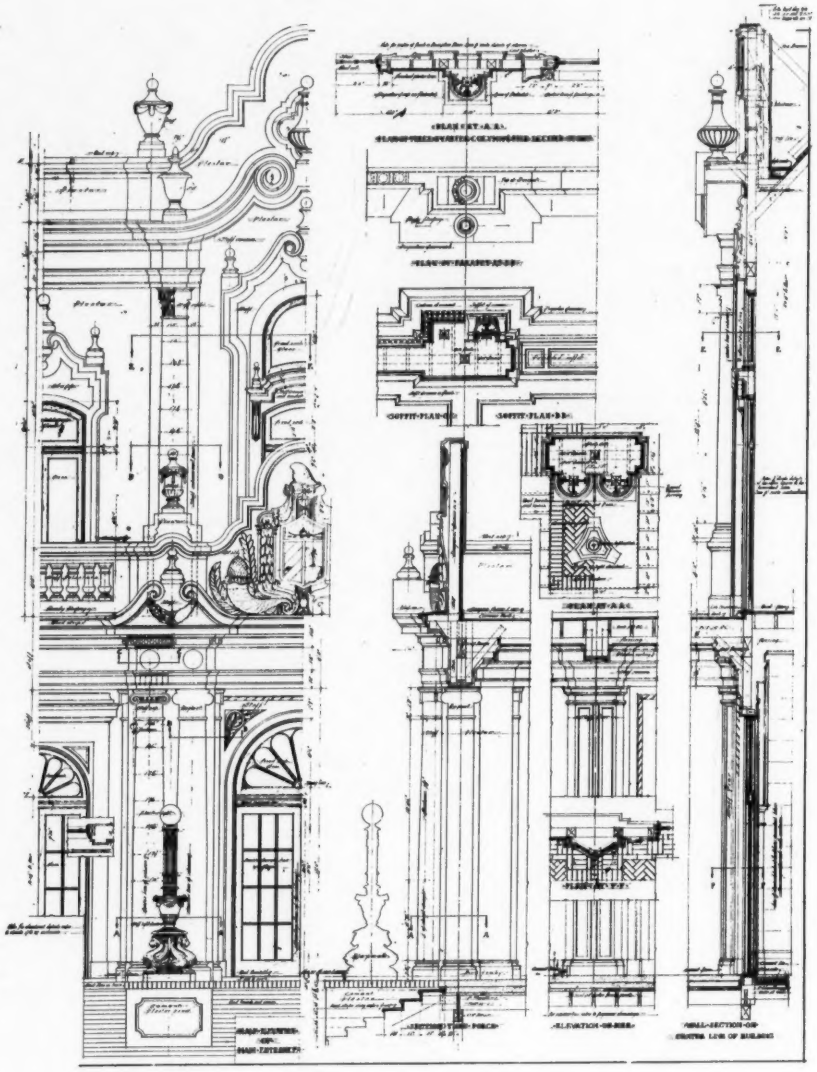
Main Tower Details

Cuban Building, P. P. I. E.

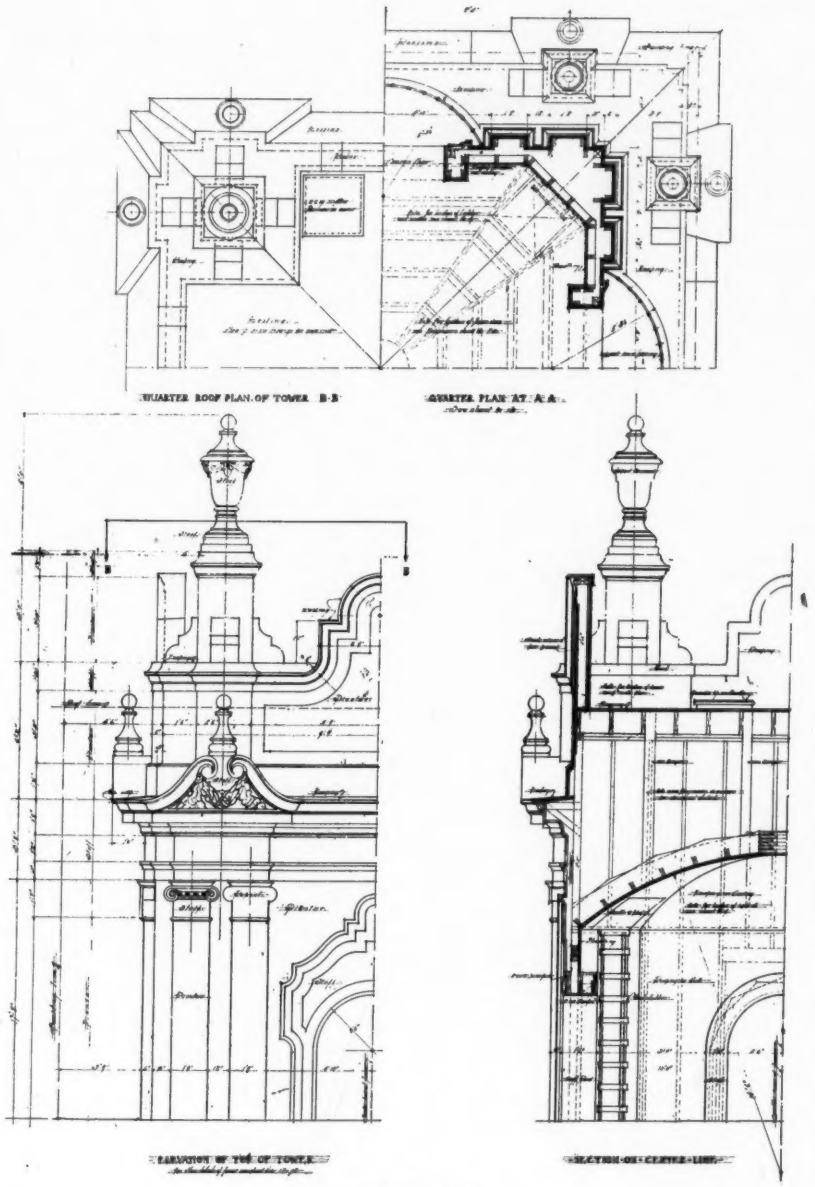
Francisco J. Centurion, Architect, Havana, Cuba



**Cuban Building, P. P. I. E. Patio Detail**
Francisco J. Centurion, Architect, Havana, Cuba



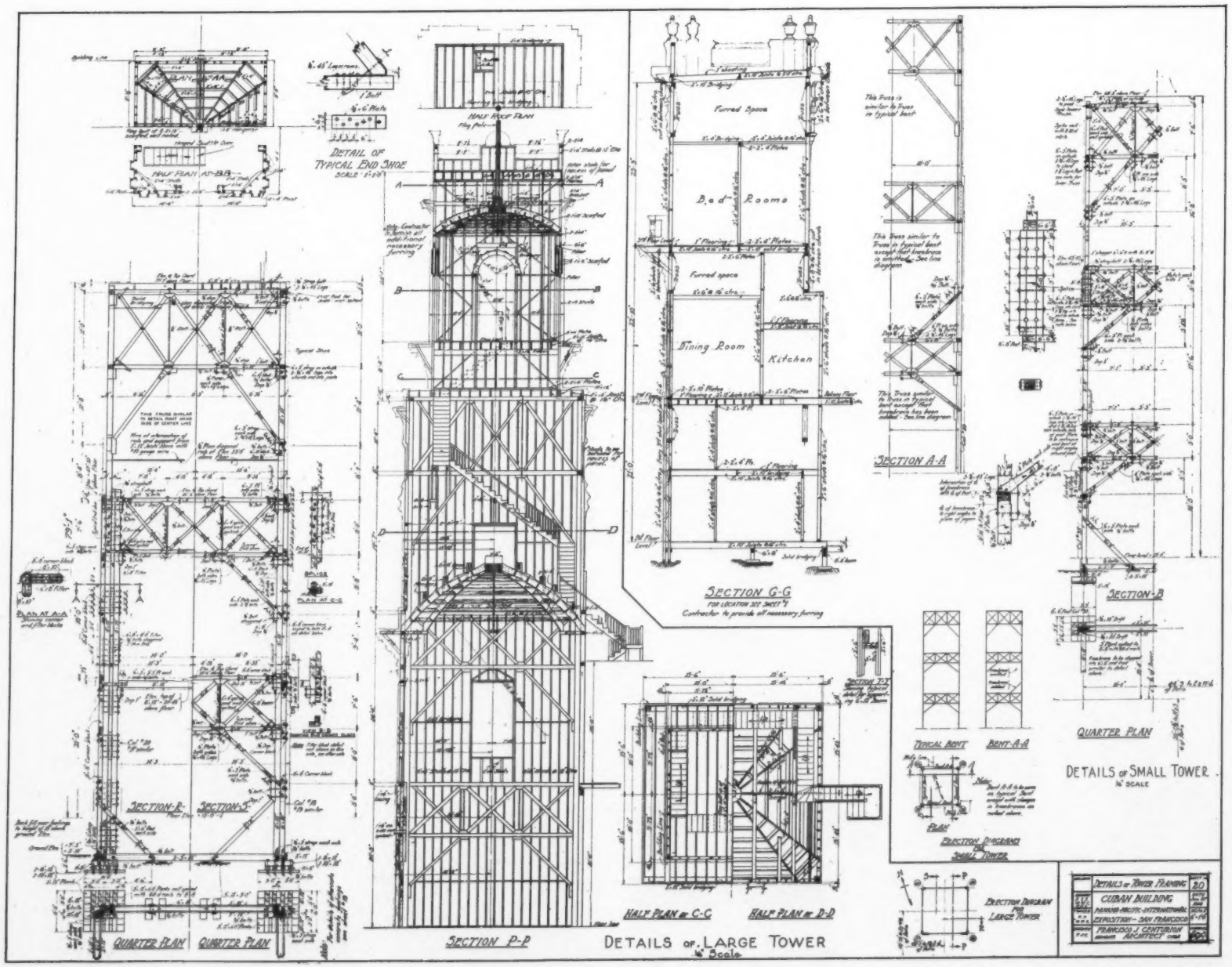
Main Entrance Detail



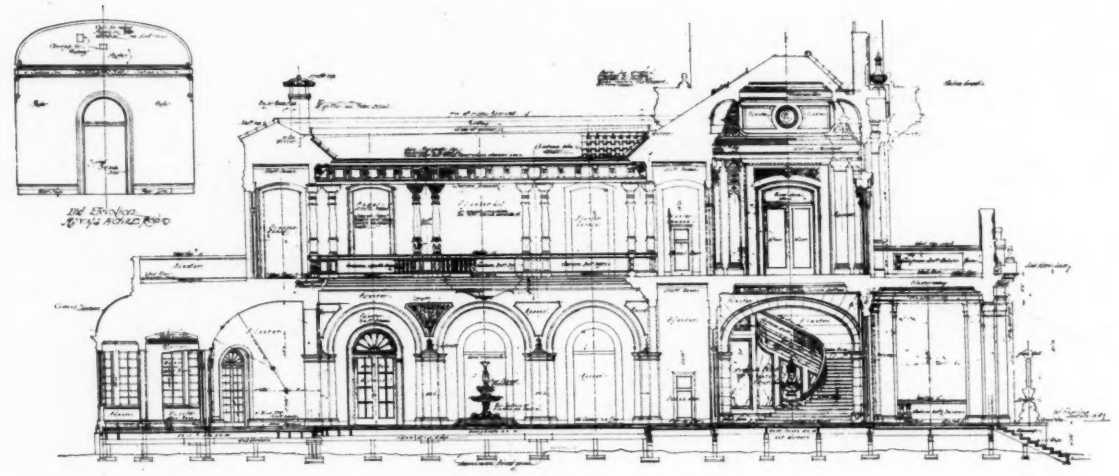
Main Tower Details

Cuban Building, P. P. I. E.

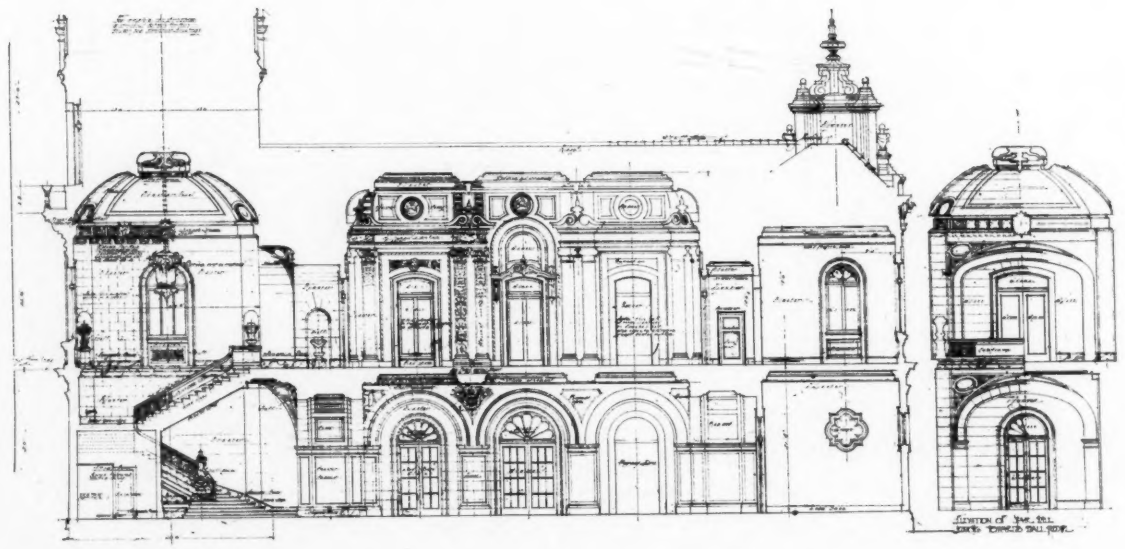
Francisco J. Centurion, Architect, Havana, Cuba




**Cuban Building, P. P. I. E. Details of Tower Framing**
Francisco J. Centurion, Architect, Havana, Cuba

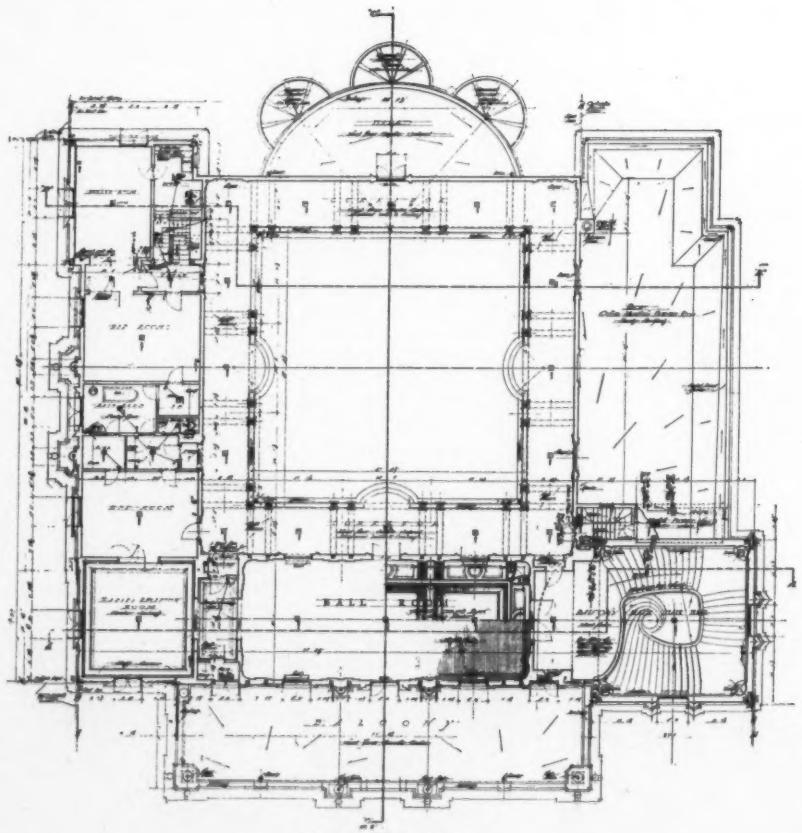


Cuban Building, P. P. I. E. Section C. C.

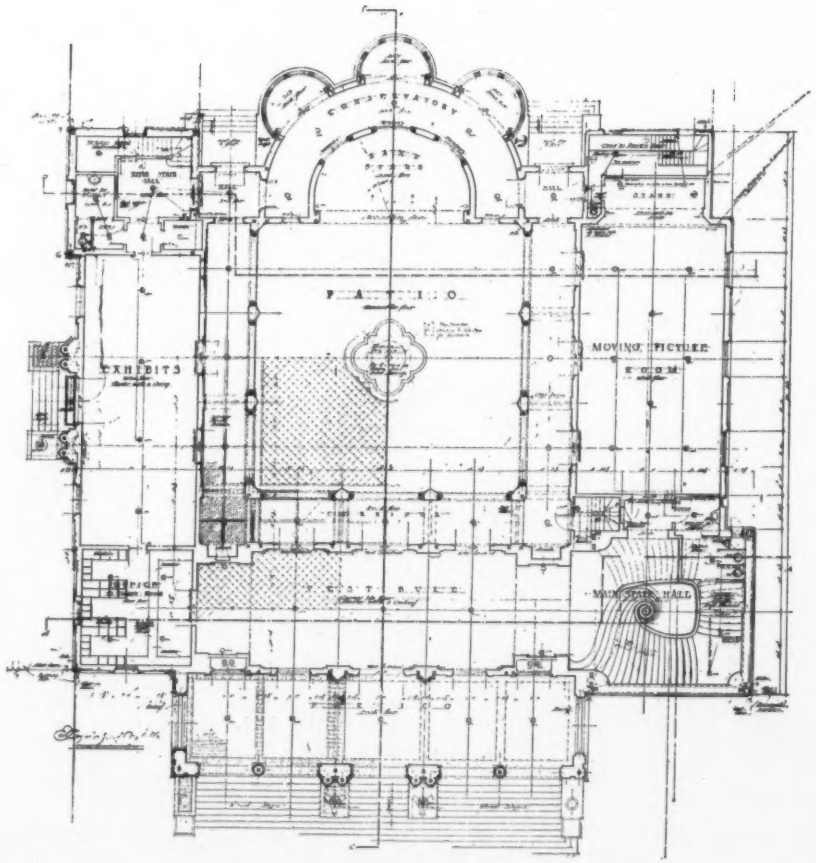


Cuban Building, P. P. I. E. Section A. A.

Francisco J. Centurion, Architect, Havana, Cuba



Second Floor Plan




First Floor Plan

Cuban Building, P. P. I. E.

Francisco J. Centurion, Architect, Havana, Cuba

THE PACIFIC COAST ARCHITECT is the official organ of the San Francisco Chapter of the American Institute of Architects.

*San Francisco Chapter, 1881*—President, G. B. McDougall, Russ Building, San Francisco, Cal. Secretary, Sylvain Schnaittacher, First National Bank Building, San Francisco, Cal.
Chairman of Committee on Public Information, William Mooser, Nevada Bank Building
Chairman of Committee on Competition, Geo. B. McDougall, 235 Montgomery St.
Date of Meetings, third Thursday of every month; annual, October.

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**OTHER PACIFIC COAST CHAPTERS OF THE AMERICAN INSTITUTE OF ARCHITECTS.**

*Southern California Chapter, 1894*—Vice-President, A. C. Martin, 430 Higgins Bldg., Los Angeles, Cal. Secretary, Fernand Parmentier, Byrne Building, Los Angeles, Cal.
Chairman of Committee on Information, W. C. Pennell, Wright & Callender Bldg., Los Angeles.
Date of meetings, second Tuesday (except July and August), (Los Angeles).

*Oregon Chapter, 1911*—President, Morris H. Whitehouse, Wilcox Building, Portland, Ore.
Secretary, Ellis F. Lawrence, Chamber of Commerce Building, Portland, Ore.
Chairman of Committee on Public Information, Ellis F. Lawrence.
Date of Meetings, third Thursday of every month, (Portland); annual, October.

*Washington State Chapter, 1894*—President, James Stephen, 726 New York Block, Seattle, Wash. Secretary, Arthur L. Loveless, 513 Colman Building, Seattle.
Chairman of Committee on Public Information, Chas. H. Alden, 513 Colman Bldg., Seattle (till further notice send all communications to Arthur L. Loveless, 513 Colman Building, Seattle).
Date of Meetings, first Wednesday (except July, August and September), (at Seattle except one in spring at Tacoma); annual, November.

*Colorado Chapter, 1892*—President, George H. Williamson, 528 Majestic Bldg., Denver, Colo. Secretary, Arthur A. Fisher, 459 Railway Exchange Building, Denver, Colo.
Chairman of Committee on Public Information, Arthur A. Fisher, 459 Railway Exchange Bldg., Denver, Colo.
Date of Meetings, first Monday of every month (Denver, Colo.); annual, September.

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**THE AMERICAN INSTITUTE OF ARCHITECTS.**

**The Octagon, Washington, D. C.**

**OFFICERS FOR 1914.**

President .....R. Clipston Sturgis, Boston, Mass.
First Vice-President .....Thomas R. Kimbal, Omaha, Neb.
Second Vice-President....Frank C. Baldwin, Washington, D. C.
Secretary.....D. Knickerbacker Boyd, Philadelphia, Pa.
Treasurer.....John L. Mauran, St. Louis, Mo.

**BOARD OF DIRECTORS.**

**For One Year.**

Irving K. Pond, Steinway Hall, Chicago, Ill.
John M. Donaldson, Penobscot Building, Detroit, Mich.
Edward A. Crane, 1012 Walnut St., Philadelphia, Pa.

**For Two Years.**

Burt L. Fenner, 160 Fifth Ave., New York, N. Y.
C. Grant LaFarge, 25 Madison Sq., N., New York, N. Y.
H. Van Buren Magonigle, 7 West 38th St., New York, N. Y.

**For Three Years.**

Octavius Morgan, 1126 Van Nuys Bldg., Los Angeles, Cal.
W. R. B. Willcox, Central Bldg., Seattle, Wash.
Walter Cook, New York, N. Y.

**Auditors.**

Thomas J. D. Fuller, 806 Seventeenth St., Washington, D. C.
Robert Stead, 906 F Street, Washington, D. C.

**SAN FRANCISCO CHAPTER, A. I. A.**

The regular monthly meeting of the San Francisco Chapter of the American Institute of Architects was held at the Tait-Zinkand Cafe on Thursday evening, September 17, 1914. The meeting was called to order at 9:10 by Mr. Edgar A. Mathews, Vice-President, in the absence of the President.

Mr. R. E. Smith and Mr. Clarkson Swain were present as guests of the Chapter.

MINUTES.

The minutes of the regular meeting held August 20, 1914, were read and approved.

STANDING COMMITTEES.

None of the Standing Committees had anything to report with the exception of the Educational Committee on Practice. Mr. Smith O'Brien of this Committee stated that he felt embarrassed in asking speakers when there was such a small attendance at the meetings. Mr. R. E. Smith read a very interesting paper on "Illumination from Concealed Sources," and illustrated it with lantern slides. At the conclusion of Mr. Smith's remarks he was voted the thanks of the Chapter.

SPECIAL COMMITTEES.

There were no reports from the Special Committees.

MEMBERSHIP.

Mr. Ernest L. Norberg having made the necessary application for membership and having been balloted upon, Messrs. O'Brien and Headman were appointed tellers to count the ballots. Thirty-three ballots were received and counted and Mr. Norberg was declared unanimously elected to Chapter membership.

At the request of Mr. Albert Sutton, the matter of his resignation was reconsidered and Mr. Sutton, on motion duly made, seconded and carried, was restored to Chapter membership and his resignation laid on the table.

COMMUNICATIONS.

The following communications were received and ordered placed on file:

Communication from Mr. George B. Hollister, Manager of the Pacific Gas & Electric Company, on New Building Law. Letter from Mr. Edgerton Swartwout, relative to building for the Department of Justice, Washington, D. C. Communication from Mr. MacDonald Mayer in regard to Portland Post Office Competition. Communication from Mr. E. C. Kemper in regard to the resignation of Mr. Albert Sutton, and one from Mr. Sutton relating to his resignation. Communications from Mr. Carl F. Gould relating to Architectural Convention in 1915.

UNFINISHED BUSINESS.

There was no unfinished business.

NEW BUSINESS.

In the matter of the communication from the Oregon Chapter, the Secretary was directed to advise the Institute that it was the sense of this Chapter that no action should be taken with reference to the Portland Post Office Competition unless requested by the Institute and to notify the Oregon Chapter accordingly.

In the matter of the communication from the Committee on Government Architecture, the Secretary was directed to communicate with Senators Perkins, Works and Newlands regarding the matter of upholding the attitude of the Institute.

NOMINATION OF OFFICERS.

The next matter of business was the nomination of officers for the ensuing year. The following were placed in nomination in accordance with the By-Laws, and duly declared the nominees to be voted upon at the annual meeting in October:

President, W. B. Faville; Vice-President, John Bakewell, Jr.; Secretary-Treasurer, Sylvain Schnaittacher; Trustees: Clinton Day, Henry A. Schulze and James W. Reid.

There being no further business before the Chapter, the meeting adjourned at 10 o'clock. ♠ ♠ ♠

**OREGON CHAPTER, A. I. A.**

Held at the Benson Hotel, August 20, 1914.

Meeting called to order by President Whitehouse. Those present were Messrs. Whitehouse, Naramore, Hogue, Beckwith, Tobey, Feuilihoux, Smith, Mayer, Doyle, Jacobberger and Lawrence.

Mr. Naramore moved and Mr. Feuilihoux seconded that the min utes of the last meeting be accepted as printed. Motion carried.

REPORTS OF COMMITTEES.

Mr. Whitehouse reported that he had received word from Mr. Lazarus, Chairman of the Special Committee on Contracts and Documents, that he had filed a report of his findings with the Institute Committee.

Mr. Doyle, Chairman of Rose Festival Committee, reported as follows:

FINAL REPORT OF ROSE FESTIVAL COMMITTEE.

Mr. Morris H. Whitehouse, August 19, 1914.
Pres. Oregon Chapter, A. I. A.,
Portland, Oregon.

Mr. President: Your Committee on Rose Festival desires to make a final report as follows on our work in connection with the Rose Festival held in this city.

At one of the last meetings of the Committee, Mr. Mayer was requested to make drawings of a Festival Center and the decorative treatment of the streets, embodying ideas presented sketches by other members of the Committee. This was done and presented with estimates of cost, to the management, through Mr. Woodard, Chairman of the Committee on Decoration.

The original appropriation was to have been $15,000; this was cut to $10,000, then to $7,500, and all work on decoration was held up until the last moment by Pres. Colt on account of lack of funds. They finally spent less than $2,500, we are informed by Mr. Woodard, and he gives this as his reason for dropping the scheme and not taking it up further with us.

Respectfully submitted,

A. E. DOYLE,
Chairman.

There being no objection, the report was ordered filed. Mr. Doyle was instructed, however, to prepare an article for publication, including a reproduction of the Committee's drawings for the Festival Center, showing the activity of the Chapter.

COMMUNICATIONS.

A letter was presented by President Whitehouse from President Gould, of the Architectural League of the Pacific Coast, announcing that the annual Convention will take place in Seattle on October 15 and 16, 1914, and requesting the co-operation of the Oregon Chapter.

A letter from Theodore Hardee, Chief of Liberal Arts, requesting the Chapter to exhibit, was referred to the Educational Committee with instructions to ascertain what other Chapters were doing and report back.

NEW BUSINESS.

Mr. Lawrence submitted a report showing a comparative summary of the sources of study at twenty-four Schools of Architecture in the country, from which averages were established. The course as suggested by Mr. Lawrence for the University of Oregon was given in comparison with these averages. The support of the Chapter was urged for this new School of Architecture. The report was submitted to the Educational Committee.

The Secretary asked for instructions concerning the form of notification and ballot to be sent the members to obtain their choice for Fellowship, according to Mr. Lazarus' motion of the last meeting.

A long discussion followed, during which several members were obliged to leave, breaking the quorum.

It was decided, however, to leave the recommendation to the Executive Committee, which would base their recommendation on the report of a Special Committee to receive ballots on or before September 1st. Mr. Naramore, Chairman; Mr. Hogue and Mr. Beckwith, as members of a Special Committee.

During the discussion it was pointed out that Mr. Whitney's resignation was in the hands of the Chapter. Also that it was unlikely that the Directors of the Institute would recommend for advancement to the Fellowship any new Institute associate members. It was suggested also that every one securing a majority of votes cast should be recommended. This would allow more than one nominee.

Meeting adjourned.

ELLIS F. LAWRENCE,
Secretary.

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**SOUTHERN CALIFORNIA, A. I. A.**

The Southern California Institute of Architects, Los Angeles, held no meeting during the month of September. The next meeting will be held on October 13, 1914.

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**WASHINGTON STATE CHAPTER, A. I. A.**

As the Washington State Chapter, A. I. A., does not hold meetings during the months of July, August and September, there will be no minutes of meetings published until October, when they will be resumed.

# How a Tin Roof Should be Laid

**These suggestions are in accordance with the standard working specifications adopted by the National Association of Sheet Metal Contractors.**

### Slope of Roof

If the tin is laid flat seam or flat lock, the roof should have an incline of one-half inch or more to the foot. If laid standing seam, an incline of not less than two inches to the foot. Of course, good tin is constantly being used with entire success on roofs of less pitch than this, some of them almost flat, but a good pitch is desirable to prevent any accumulation of water and dirt in shallow puddles. Gutters, valleys, etc., should have sufficient incline to prevent water standing in them or backing up in any case far enough to reach standing seams.

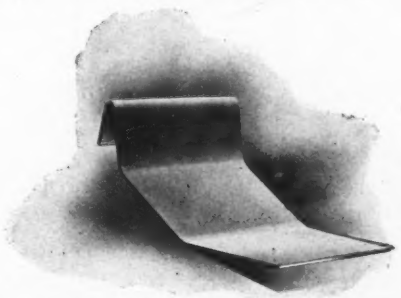

**FIG. A.—TIN ROOFING CLEAT**
Used for fastening the sheets to the roof boards.

Tongued and grooved sheathing-boards are recommended, of well-seasoned dry lumber, narrow widths preferred, free from holes, and of even thickness.

A new tin roof should never be laid over old tin, rotten shingles, or tar roofs.

Sheathing-paper is not necessary where the boards are laid as specified above. If steam, fumes, or gases are likely to reach the under side of the tin, use some good water-proof sheathing-paper, such as black Neponset. Never use tar-paper.

Seams should be made as shown in the accompanying illustrations. No nails should be driven through the sheets.

### Flat-Seam Tin Roofing

When the sheets are laid singly, they should be fastened to the sheathing-boards by cleats (*see Fig. A*), using three to each sheet, two on the long side and one on the short side. Two 1-inch barbed wire nails to each cleat. If the tin is put on in rolls the sheets should be made up into long lengths in the shop, the cross seams locked together and well soaked with solder. The sheets should be edged one-half

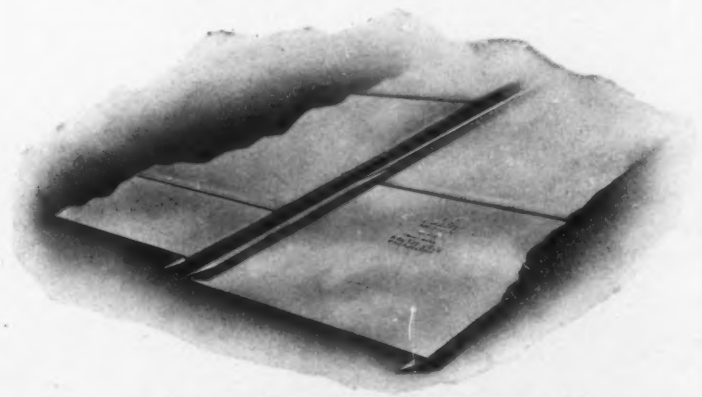

**FIG. B.—FLAT-SEAM TIN ROOFING**
Sheets of tin put together in long lengths, with edges turned, ready to lay on the roof.

inch, fastened to the roof with cleats spaced eight inches apart, cleats locked into the seam and fastened to the roof with two 1-inch barbed wire nails to each cleat. (*See Figs. B, C, D, and E.*)

### Standing-Seam Tin Roofing

The sheets should be put together in long lengths in the shop, the cross seams locked together and well soaked with solder. The sheets should be applied to the roof the narrow way, fastened with cleats spaced one foot apart. One edge of the course is turned up one and a quarter inches at a right angle, and the cleats are installed (*see Fig. F*). The adjoining edge of the next course is turned up one and a half inches, and these edges are locked together (*see Fig. G*), turned over (*see Fig. H.*), and the seam flattened to a rounded edge, as shown in the accompanying illustrations (*Figs. J and K*).

### Valleys and Gutters

These should be of IX tin, and formed with flat seams, applying the sheets the narrow way. It is important to see that good solder is used, bearing the manufacturer's name,

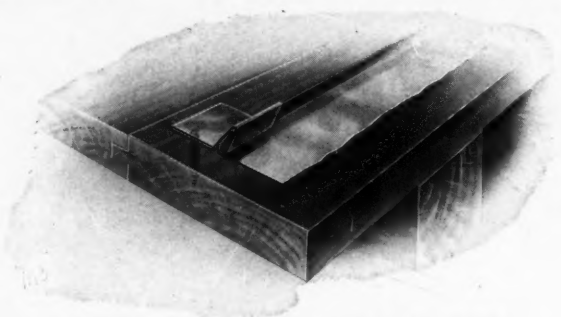

**FIG. C.—FLAT SEAM TIN ROOFING**

Showing method of fastening the tin to the roof. Cleat in position. The adjoining sheet is hooked over this, and the seam hammered down and soldered, locking the cleat firmly into the seam. One end of the cleat is turned over the nail-heads, to prevent them from scratching the under side of the tin.

and guaranteed one-half tin and one-half lead, new metals, using nothing but rosin as a flux. The solder should be well sweated into all seams and joints.

### Painting

All painting should be done by the roofer. The tin should be painted one coat on the under side before it is applied to the roof. The upper surface of the tin roof should be carefully cleaned of all rosin spots, dirt, etc., and immediately painted. The approved paints are metallic brown, Venetian red, red oxide, and red lead, mixed with pure linseed oil. No patent dryer or turpentine to be used. All coats of paint should be applied with a hand-brush, and well rubbed on. Apply a second coat two weeks after the first. The third coat to be applied one year later.

### Caution

No unnecessary walking over the tin roof, or using the same for storage of materials, should be allowed at any time. Workmen should wear rubber-soled shoes or overshoes when on the roof. Wherever the slope is steep enough, tin should be laid with standing seams, which allow for expansion and contraction.

### Maintenance

To keep the roof in good condition subsequent painting will hardly be necessary at shorter intervals than three to five years' time, even longer, depending upon the slope of the roof and upon local conditions.

Since gutters are the natural receptacle for dirt, leaves, etc., they should be swept out and painted every two or three years.

Look over the roof carefully when painting it, to locate and repair any accidental damage.

♣ ♣ ♣

### Standard Tin Roofing Specification

The following specification has been adapted for architects' use from the Standard Working Specifications of the National Association of Sheet Metal Contractors of the United States. This represents the best practice in laying tin roofs. Architects who have not already done so, will do well to incorporate this in their regular specification forms. Good workmanship and fair treatment are as necessary as good material to get satisfactory results from tin roofing work; hence this specification should be enforced to the letter.

### "Tin Roofing Work"

"All tin used on this building shall be N. & G. Taylor Co.'s Target-and-Arrow brand. No substitute for this brand will be allowed. Use IC thickness for the roof proper, desks, etc., and IX thickness for valleys, gutters, and spouts, as required by design. One coat of red lead, iron oxide, metallic brown or Venetian red paint, with pure linseed oil, shall be applied to the under side of the tin before laying.

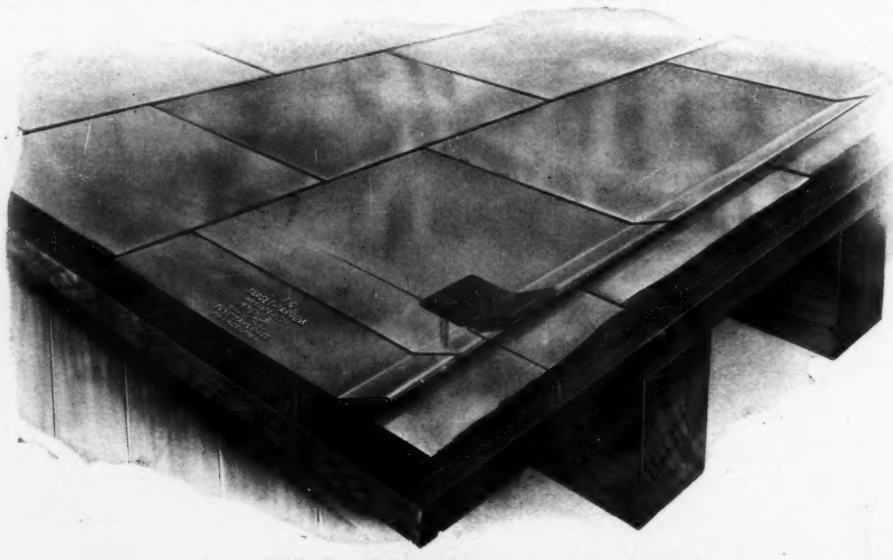

**FIG. D.—FLAT-SEAM TIN ROOFING**

Showing the sheets in position before seam is hammered down and soldered. One cleat also shown (magnified), with faint lines indicating the various folds of tin in the seam.

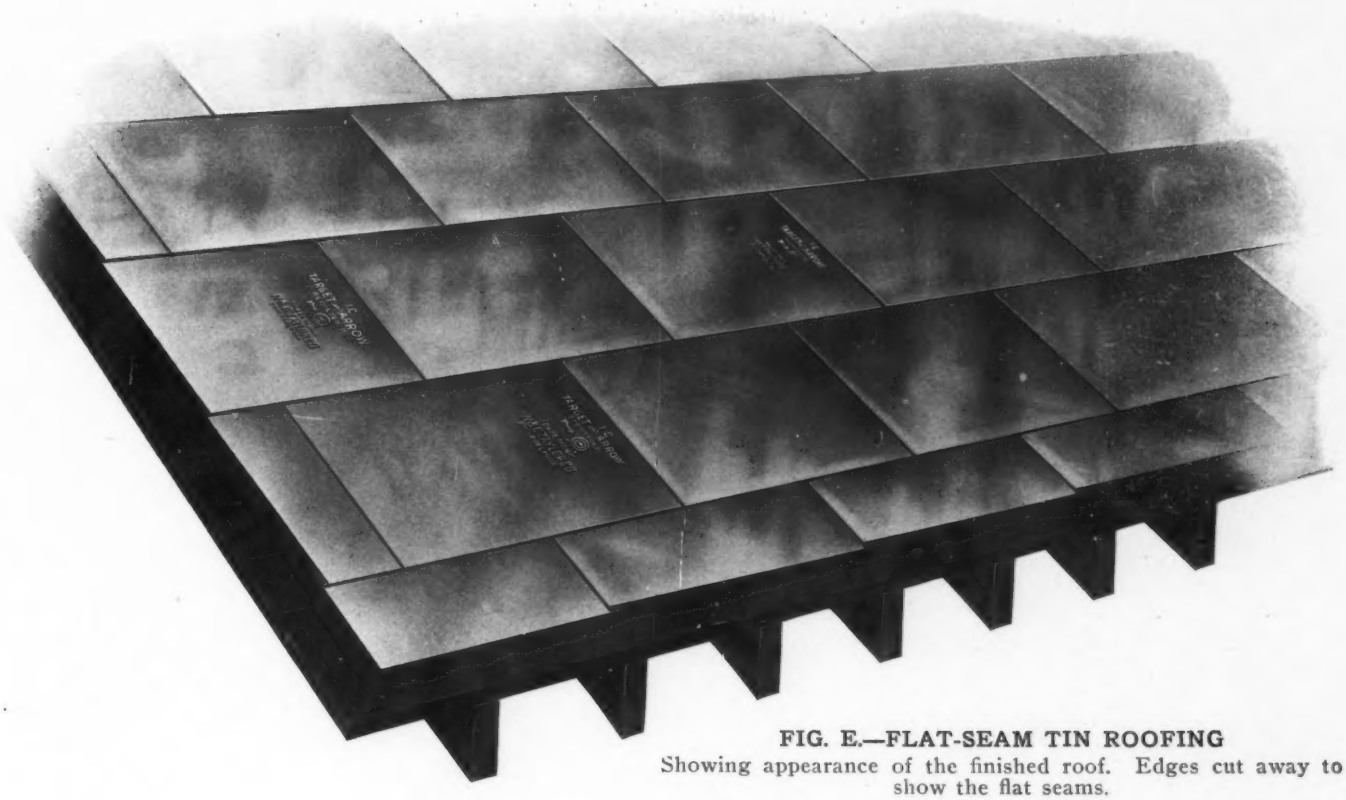

**FIG. E.—FLAT-SEAM TIN ROOFING**
Showing appearance of the finished roof. Edges cut away to show the flat seams.

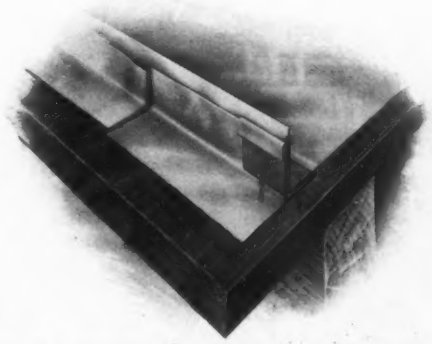

**FIG. F.—STANDING-SEAM TIN ROOFING**
First operation, showing adjoining sheets turned up at right angles, with cleat installed.

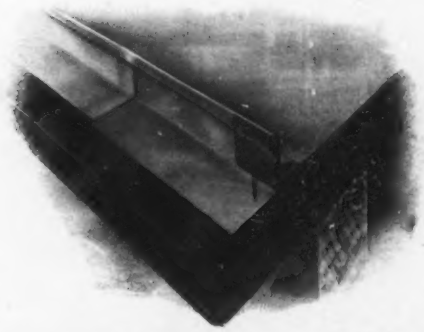

**FIG. G.—STANDING-SEAM TIN ROOFING**
Second operation. Projecting edge turned over.

"For *flat-seam roofing,* edges of sheets to be turned one-half inch; all seams to be locked together and well soaked with solder. Sheets to be fastened to the sheathing-boards by cleats spaced eight inches apart, cleats locked in the seams and fastened to the roof with two one-inch barbed wire nails; no nails to be driven through the sheets.

**FIG. H.—STANDING-SEAM TIN ROOFING**
Third operation. Entire seam turned partly over.

"For *standing-seam roofing,* sheets to be put together in long lengths in the shop, cross seams to be locked together and well soaked with solder; sheets to be made up the narrow way in the rolls and fastened to the sheathing-boards by cleats spaced one foot apart.

"*Valleys and gutters* to be formed with flat seams well soldered, sheets to be laid the narrow way.

"*Flashings* to be let into the joints of the brick or stone work, and cemented. If counter-flashings are used, the lower edge of the counter-part shall be kept at least three inches above the roof.

"*Solder* to be of the best grade, bearing the manufacturer's name, and guaranteed one-half tin and one-half lead, new metals. Use rosin only as a flux.

"*Caution.*—No unnecessary walking over the tin roof or using same for storage of material shall be allowed. In walking on the tin care must be taken not to damage the paint or break the coating of the tin. Rubber-soled shoes or overshoes should be worn by the men on the roof.

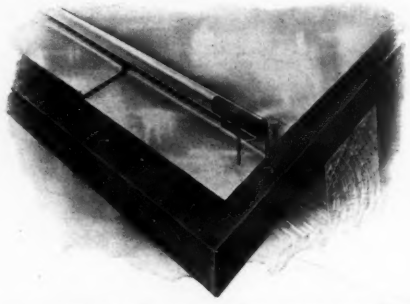

**FIG. J.—STANDING-SEAM TIN ROOFING**
Fourth operation. Standing seam completed, showing cleat in position. Thickness of seam magnified, to show the folds of the metal.

"*Painting tin work.*—All painting of tin work to be done by the roofer, using red lead, iron oxide, metallic brown, or Venetian red paint, with pure linseed oil—no patent dryer or turpentine to be used.

"All paints to be applied with a hand-brush and well rubbed on. Tin to be painted immediately after laying. A second coat shall be applied in a similar manner, two weeks later.

"No deviations from these specifications shall be made unless authority is given in writing by the architect. Only a first-class roof will be accepted."

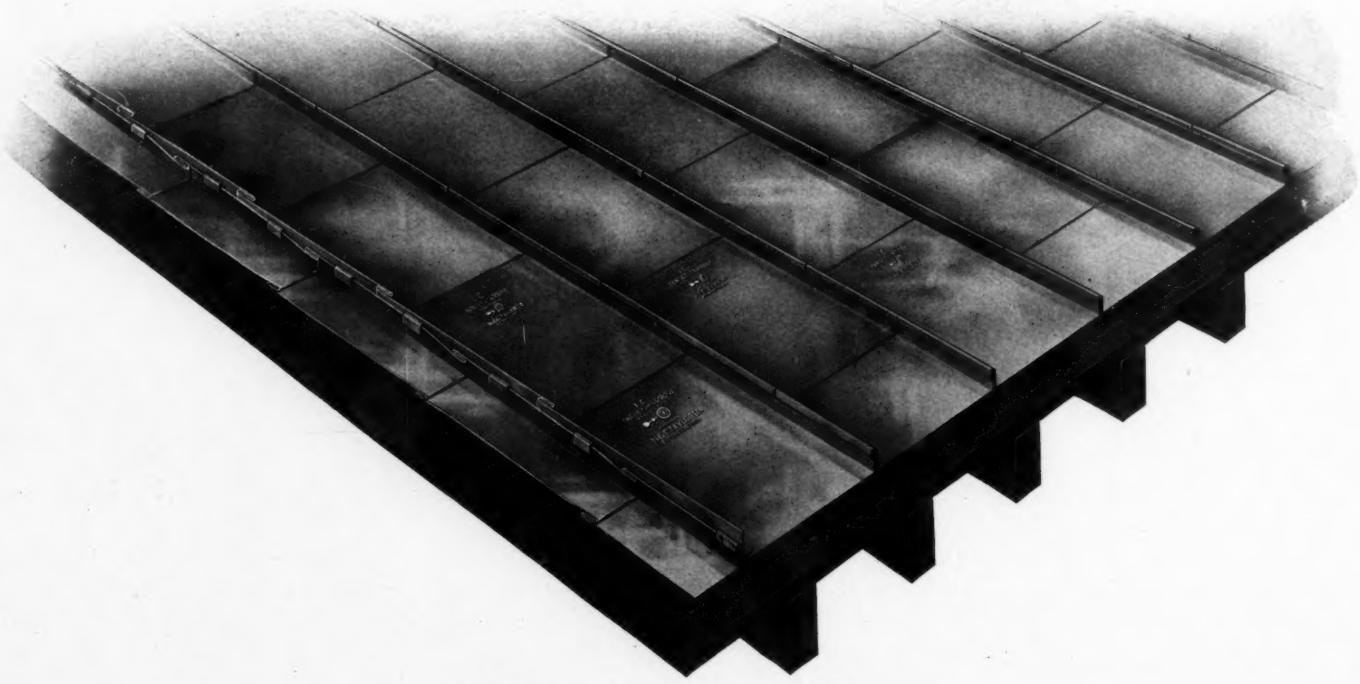

**FIG. K.—STANDING-SEAM TIN ROOFING**
Showing appearance of finished roof, with one seam unfinished to show application of cleats; thickness of sheets and joints exaggerated in the latter.

# INDUSTRIAL INFORMATION

W. P. Fuller & Co. executed a big contract in the installation of glass in the new St. Ignatius Church, San Francisco.

G. C. Kennedy, architect, Everett, Wash., is spending a few weeks in California.

Architect J. J. Frauenfelder, Los Angeles, is permanently located in new offices at 1116-17 Story Building.

S. T. Johnson Co., 1337 Mission Street, San Francisco, installed the oil burners in the new St. Ignatius Church, San Francisco.

Architect O. R. Thayer, formerly located in the Merchants' National Bank Building, has moved to 20 Montgomery Street, San Francisco.

Architect Thornton, Los Angeles, has moved his office from 482 Pacific Electric Building to suite 916-917 W. P. Story Building, Sixth Street and Broadway.

Architect W. C. Pennell, Los Angeles, is now located in his new offices in suite 1303-1304 Baker-Detwiler Building on Sixth Street, between Hill and Olive Streets.

Architects Willis Polk & Co., San Francisco, now occupy their new quarters in the Hobart Building. For a number of years the office of this company was located in the Merchants Exchange Building.

T. F. Howard, architect, Pendleton, Oregon, recently celebrated the fiftieth anniversary of his arrival in Umatilla County. Mr. Howard reached that county from Iowa in 1864 and has resided in Pendleton since 1875.

E. J. Smith, 325 H. W. Hellman Building, Los Angeles, was the only successful candidate to pass the examination allowing him to practice architecture, at the latest examination conducted by the State Board. Mr. Smith has opened offices at the above address.

The United Materials Company, San Francisco, covered the roof of the new Lansdale School, Lansdale, Marin County, with Spanish tile, made by the Los Angeles Pressed Brick Company. Architect J. W. Dolliver, 701 Royal Insurance Building, San Francisco, prepared the plans for this school.

The Frederick Post Co., San Francisco, have on hand a big stock of tracing and drawing papers and pencils, despite the shortage in other sections on these commodities resulting from the curtailment of imports brought about by the war. The company is in the enviable position to fill any order for immediate shipment.

In the last issue of The Pacific Coast Architect we inadvertently attributed the architecture of the Lux School of Industrial Training, San Francisco, to Architect W. H. Weeks, Post Street, San Francisco. Architect William C. Hays, 1325 First National Bank Building, San Francisco, prepared the plans for the Lux School.

Fernand Parmentier, architect, Los Angeles, and secretary of the Southern California Chapter of the American Institute of Architects, was caught in Paris at the outbreak of the war. It was his intention to study European architecture, but it is doubtful if he will accomplish much in this respect owing to the unforeseen conditions.

Architects W. H. Weeks, San Francisco, and Norman F. Marsh, Los Angeles, have been named a special commission by officials of the Panama-Pacific International Exposition to prepare plans for model school buildings to be erected on the exposition grounds. These schools will be a feature of the educational exhibit at the exposition.

W. H. Worden, superintendent of Berry Brothers' San Francisco factory is an enthusiastic sailor. Mr. Worden owns a fast launch, equipped for deep-sea travel. It has sleeping quarters for six, makes nine knots an hour and is a great source of pleasure to Mr. Worden and his friends. Berry Brothers report a very lively business despite conditions of war.

The entire seating for the recently completed St. Ignatius Church, San Francisco was manufactured and installed by R. Brandelin & Co., 3155 Eighteenth Street, San Francisco. The main auditorium will seat 1,700 persons, while the gallery will accommodate 300 persons. The seating of this magnificent church has been pronounced absolutely ideal and in every way appropriate with the surroundings.

The United Materials Company, San Francisco, furnished an interlocking terra-cotta shingle tile, manufactured by the Los Angeles Pressed Brick Company, Los Angeles, for the Nickerson residence, Claremont, Cal. Architect William H. Ratcliffe, Berkeley, prepared the plans for this building. The United Materials Company has also received the contract to cover the roof of the new Southern Pacific depot at Third and Townsend Streets, San Francisco, with mission tile, and the contract for a tile roof on the new postoffice at Hayward, Cal.

Mr. J. C. Bennett, of the S. T. Johnson Company, manufacturers of oil burning equipment, has just returned from the southern part of the State, where he installed oil burners and complete oil-burning equipment for heating and cooking in all the officers' quarters at Fort Rosecrans, near San Diego. These burners are operated from a blower, located at the power plant so that no machinery or apparatus is in the officers' quarters, other than the oil and air pipes which run underground to the various buildings, supplying oil and air under low pressure for operating the burners.

Through the instrumentality of Architect A. R. Denke, Humboldt Bank Building, San Francisco, the Board of Supervisors of that city have adopted an amendment to the Building Ordinances regulating the building of pergolas and yard space on roof of such buildings. At the present time it is declared that fully ninety per cent of the buildings of this class have no provision for such space on the roofs and the occupants are restricted to a small area of yard space in the rear of the building or, occasionally, in a center court. The action of Mr. Denke will mean much to the occupants and owners of flats and apartments in San Francisco.

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### Vancouver Civic Center

The committee appointed by His Worship Mayor Baxter invite competitive designs for the development of the proposed Civic Center. Premiums amounting to $500 and $250 will be awarded to the designs placed first and second respectively. The award will be made by independent experts, whose decision shall be final. All designs must be delivered not later than November 30, 1914. Program of competition and plans may be obtained from the Secretary, Vancouver Civic Center Committee, Molsons Bank Building, Vancouver, B. C.

## CALIFORNIA

*San Francisco*—Architect George William Kelham, Sharon Building, San Francisco, has completed plans, which have been approved by the Library Trustees, for a three-story and basement Class A construction library, to be erected for the City of San Francisco in the Civic Center, at a cost of $1,000,000. The plans will be submitted to the Supervisors for their approval. Construction cannot be started until the $900,000 bond issue has been sold.

*San Francisco*—Architects Rousseau & Rousseau, Monadnock Building, San Francisco, have completed plans for a four-story and basement brick and steel apartment house for the Metropolis Investment Co., to be erected at the northwest corner of Hyde and Sacramento Streets, at a cost of $45,000.

*San Francisco*—Architects Zanolini & Jewett, 604 Montgomery Street, San Francisco, have completed plans for a four-story and basement Class C construction apartment house, to be erected for Mrs. Mary A. Bradbury, at the northwest corner of Polk and California Streets, at a cost of $47,000.

*San Francisco*—Architect H. W. Baerresen, Service Building, San Francisco, is preparing plans for a two-story frame and plaster exhibit building for the State of Colorado. It will be erected in the Panama-Pacific Exposition grounds at a cost of $40,000.

*San Francisco*—Architect Houghton Sawyer, Shreve Building, San Francisco, has completed plans for a seven-story and basement, Class A construction apartment house, for Mr. Morehead, to be erected at the northwest corner of California and Mason Streets. It will cost $150,000.

*Los Angeles*—Architects Parkinson & Bergstrom, 1035 Security Building, Los Angeles, have completed plans for a twelve-story and basement Class A steel frame bank and office building, to be erected at the northwest corner of Fifth and Spring Streets, for the F. O. Engstrum Company, at a cost of $200,000.

*Los Angeles*—Architect John T. Comes, 602 Washington Bank Building, Pittsburg, has forwarded plans for the foundation of the new St. Vincent's Church, to be built at Figueroa and Adam Streets, to Architects Allison & Allison, 1405 Hibernian Building, who will take bids on this part of the work. The building will be of reinforced concrete and will cost $250,000.

*Los Angeles*—Architect L. L. Jones, 1125 Central Building, Los Angeles, has completed plans for a seven-story and basement reinforced concrete hotel building for C. W. Howard, to be erected at Fifth Street, east of Ruth Avenue, at a cost of about $70,000.

*Los Angeles*—Architects Train and Williams, 226 Exchange Building, Los Angeles, are preparing preliminary plans for a fourteen-story steel frame hotel building to be erected at the northwest corner of Tenth and Hope Streets for W. J. Pearson. Estimated cost about $800,000. The first two stories exterior will be faced with terra cotta and granite, and the remainder of the structure with tapestry brick and terra cotta.

*Los Angeles*—Architect Frank L. Meline, 6631 Hollywood Avenue, is preparing plans for a one and two-story and basement brick and steel church for the Fifth Church of Christ, Scientist, to be erected at La Brea and Hollywood Boulevard, at a cost of $100,000.

*Los Angeles*—Architect E. B. Rust, Title Insurance Building, Los Angeles, has completed plans for a four-story and basement brick and steel hotel for Susan Eckley, at a cost of about $37,000.

*Santa Barbara*—Architect Francis W. Wilson, 717½ State Street, Santa Barbara, is preparing working plans for a two-story and basement Class A construction library building for the City of Santa Barbara at a cost of $50,000.

*Alhambra*—Architect Norman F. Marsh, 212 Broadway Central Building, Los Angeles, has completed plans for the Alhambra high school building. It will be of brick construction, two stories, and will cost about $100,000, including equipment.

*Oakland*—Architect William A. Newman, David Hewes Building, San Francisco, is preparing plans for a two-story and basement Class C construction church, to be erected on Thirty-fourth Street near Telegraph Avenue for the Christian Science Church, at a cost of $75,000.

*Oakland*—Architect Clay N. Burrell, Albany Building, Oakland, has completed plans for a six-story and basement hotel addition for A. C. Aiken, to be erected in addition to the present building at Fifteenth and Jefferson Streets, at a cost of $65,000.

*San Mateo*—Architect Will D. Shea, 244 Kearny Street, San Francisco, has completed plans for a two-story and basement reinforced concrete lodge hall and stores for the San Mateo County Knights of Columbus Hall Association, at a cost of $40,000.

*Lodi*—Architect E. B. Brown, Yosemite Building, Stockton, has completed plans for a four-story and basement brick and steel hotel, for the Lodi Hotel Investment Company. It will cost about $100,000.

*Pittsburg*—Architect A. W. Cornelius, Merchants' National Bank Building, San Francisco, has completed plans for a two-story and basement brick school building for the Pittsburg School District, at a cost of $50,000.

*Stockton*—Architects Stone & Wright, 24 South California Street, Stockton, are working on plans for a two-story and basement brick school building for the City of Stockton, to be erected on Lower Sacramento Road at North Street, at a cost of $75,000.

*Roseville*—Architect W. H. Weeks, 75 Post Street, San Francisco, has completed plans for a one-story and basement brick and reinforced concrete school for the Roseville School District, at a cost of $40,000.

*Lindsay*—Architect F. W. Griffin, Visalia, has completed plans for a two-story and basement brick and steel school for the Lindsay School District, at a cost of $86,000.

*Van Nuys*—Architects Allison & Allison, Hibernian Building, Los Angeles, have completed plans for a two-story and basement brick school for the Van Nuys School District, at a cost of about $57,000.

*Berkeley*—Architect Eugene K. Martin, 2192 Shattuck Avenue, Berkeley, has completed plans for a two-story and basement Class C construction church building for the First Baptist Church, to be erected at the corner of Dana and Haste Streets, at a cost of $40,000.

## OREGON

*Portland*—Architect Lewis P. Hobart, Crocker Building, San Francisco, has completed plans for a Class A construction post-office for the United States Government, to be erected at Portland. It will cost $1,000,000. The competitive plans submitted by Architect Hobart have been approved. Four other San Francisco firms and one Portland firm were invited in the competition. The design is in the classic style.

*Portland*—Architects Shepley, Rutan & Cooldige, Boston, Mass., in conjunction with Architect David C. Lewis, Couch Building, Portland, are preparing plans for a bank building, to be erected at Fifth and Stark Streets for the First National Bank and Security Savings and Trust Company, at a cost of about $400,000. The structure will be modeled on the Athenian Parthenon style.

*Portland*—Architects Tourtellotte and Hummel, Rothchild Building, Portland, have about completed plans for a two-story and basement reinforced concrete school for the First Methodist Church Congregation, to be erected at the corner of Fourteenth and Taylor Streets, at a cost of $45,000.

*North Bend*—Architect J. E. Tourtellotte, Rothchild Building, Portland, has completed plans for a four-story and basement, brick and steel hotel building at a cost of $100,000.

## WASHINGTON

*Seattle*—Architect Louis Mendell, Oriental Building, Seattle, has completed plans for a six-story and basement reinforced concrete store and lofts for O'Shea Brothers, at a cost of $100,000.

*Seattle*—Architect George C. Nimmons, People's Gas Building, Chicago, has completed plans for a nine-story and basement reinforced concrete lofts for Sears-Roebuck Co., to be erected at the corner of First Avenue and Utah Street, at a cost of $850,000.

*Seattle*—Architect J. A. Creutzer, New York Building, Seattle, has completed plans for a three-story and basement brick and steel apartment house for Claude C. Ramsay, at a cost of $85,000.

*Tacoma*—Architect E. Frere Champney, Henry Building, Seattle, won the award in the architectural competition for drawing plans and preparing specifications for the proposed $100,000 Elks' Building, to be located at Seventh, C and Commercial Streets.

## MISCELLANEOUS

*New Westminster, B. C.*—Architects Gardiner & Mercer, Westminster, are working on plans for a two-story and basement stone and steel court-house building, to be erected in Westminster, at a cost of $70,000.

*Edmonton, B. C.*—Architects Van Siclen & Macomber, Alexandra Block, are preparing plans for a seven-story and basement, brick and terra cotta construction office building, to be erected on Jasper Avenue for J. H. Gariepy at a cost of $200,000.

*Austin, Tex.*—Architect John Eberson, Chicago, is preparing plans for a theater building, to be erected on the site of the present Avenue Hotel, at a cost of $200,000, for Ernest Nalle, Eugene Tips, Wilbur Allen and M. E. Millican, the owners.

# The Profession of Architecture

The statement that the medical profession is the noblest of all professions is very frequently heard. The truth of this statement is not doubted. Indeed, work of men in this profession verges often unto a holy work. The names of leaders in the medical profession have been revered by countless thousands. Likewise is the expounding of the gospel of God a truly wondrous work.

The profession of architecture, too, rightfully has a claim to rank with these noblest of all professions. Noble architecture has done its part in inspiring good; its comprehension has instilled lessons that are both lofty and enduring, for it is a gift to the ages, planted in the sight of all. The architect has problems of high import, for he himself must know of physic; and, perchance, of sermons. Homes constructed on a sanitary basis make for a sanitary city and a better and more healthful community. The effect of a building constructed on a sanitary basis is very marked on the occupants of such a building. It provokes a spirit of cleanliness, undeniably.

When the architect is well fitted for his calling, his profession is surely a delightful one. In a comparative sense his work is considerably less tedious than that of the doctor. His is the well-balanced and full life. His work calls for a free exercise of all man's facilities; physical as well as mental. His artistic sense is always encouraged, as well as his scientific mentality. The architect has his knotty problems to contend with; they are always cropping up in the construction line.

The architect calling, taken as a whole, is so vast that it is impossible for one man to take it all in or to absorb to advantage. The best in this profession must need impose limitations upon himself. No one man can do everything and anything well. However, even though there are specialists in the profession of architecture, architects are something more than specialists in the strict sense of the word. An architect is more than a creator of buildings when one considers the many and various duties involved.

In the first place the architect must be a salesman to get business; he must be a designer of whole townships; he must be a superintendent of construction and an arbitrator of disputes pertaining to construction; he must be a landscapist; his eye is trained for selection of sites; he must be a mathematician, a specialist in laying out special equipments and, furthermore, the architect must be able to put all such mental impressions thus obtained on paper, be it in a readable text or with drawings or reproductions in water color. The aspiring architect will at once appreciate the necessity for a well rounded education before he can hope for success in this line.

As regards to specialization in the profession of architecture, assuredly its exponent is a specialist on numerous subjects in the accumulation of data for any given endeavor. Exhaustive investigations, in which the architect delves into subjects entirely divorced from his profession are necessary. In the construction of certain types of buildings the conscientious practitioner of architecture must do considerable researching, collecting and tabulating data, inspecting all kinds of edifices and out of these all he must evolve particular details of the problem.

Imagination, of course, is a chief factor of cultivation by the architect. The young architect who has imagination that will not outrun discretion and sound sense has, indeed, a wondrous gift. It is a solver of many problems. To give the correct solution in such cases as they arise is fitting evidence for fitness.

Competitive prizes are a great stimula to the imagination, and in this respect are appreciated quite widely. Competitive architectural competitions have been pretty generally condemned, but they are a decided asset in bringing experience to the young architect.

Much has been written on the subject of architecture, but not so much about the architect. This work has been called an art, science, business, craft and profession. It is really a combination of all, but more truly a profession than anything else. It is a profession no less than medicine or law.

The fees of an architect have been compared with the fee of a doctor or a lawyer. Herein lies much of the trouble and vicissitudes incident to the practice of architecture. In the first place the layman has, for years, strenuously objected to the payment of just fees for this sort of work on the grounds of it being something altogether too intangible to pay out good money for. To the eyes of this class of people an architect's work is naught but a flimsy thing of no value. It might be said that this view is most generally taken upon completion of their building.

In the matter of architect's fees there has also been considerable discussion within the ranks of the profession itself on what constituted an equable arrangement of prices; and there is room for such discussion for it is an accepted fact that most architects are underpaid despite the protestations of some of our friends among the laity.

In every age there are those practitioners who are especially favored; a few whose clientele is composed of the very rich, whether individuals or corporations, and who, seemingly, care nothing about the cost of a building or the size of the architect's fee. Such architects are surely blessed: prosperity is theirs for the asking, but their numbers are small. These men may not be especially more fitted than many of their fellow workmen, but fortune usually smiles to them through opportunity, or some process of natural selection. At any rate they are called the leaders of the day. When a man rises to such position he has small need to wish for or seek a change in conditions.

The great diversification of an architect's work has caused the confusion, resultant in an attempt to define it. The several dictionaries all differ somewhat in their definitions. The late John M. Carrere said, "An architect is a gentleman, an artist and a man of affairs."

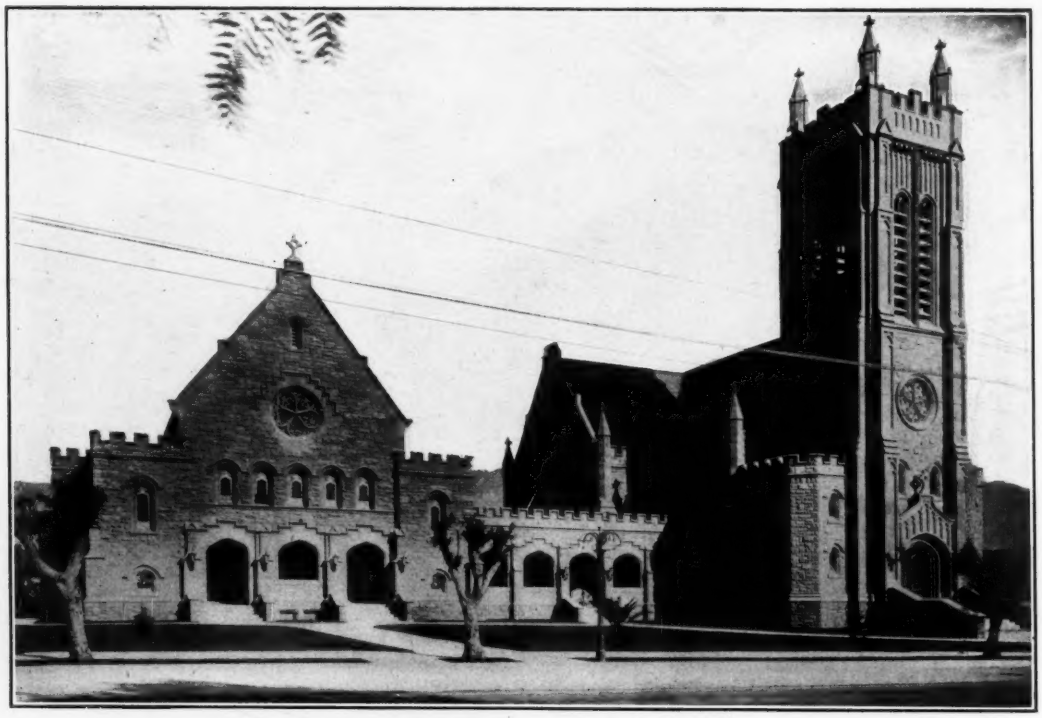
The official definition of an architect, as defined by The American Institute of Architects, is:

"An architect is a professional person whose occupation consists in originating and supplying artistic and scientific data preliminary to and in connection with the construction of buildings, their appurtenances and decorations; in supervising the operations of contractors therefor; and in preparing contracts between the contractors thereof."

In the states of California, Illinois and New Jersey, administrative officials have constructed their special definitions of an architect's duties, which are regulated in accordance. At the present writing one of two other states have framed similar bills.

# Keasbey & Mattison Company

AMBLER, PA.



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Never need painting, do not split, crack or decay, constantly grows better with the lapse of time.
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San Francisco

CHAS. J. I. DEVLIN, Architect
San Francisco

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Chas. J. I. Devlin, Architect, San Francisco

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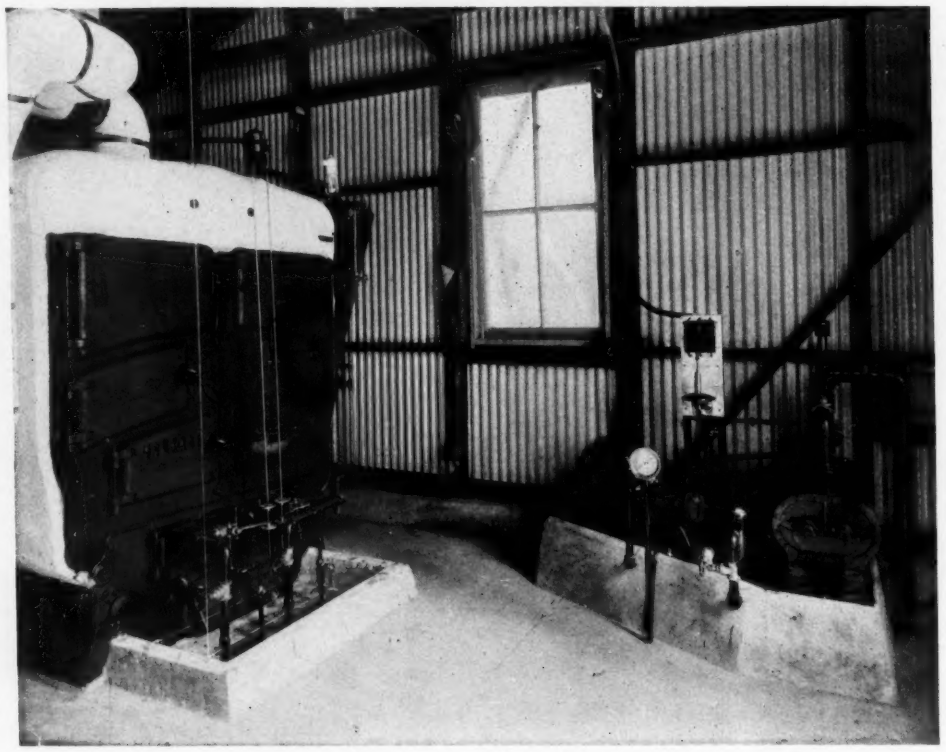

Interior of Heating Room, St. Ignatius Church, San Francisco

**NOTICE—**

Not the least important part of the St. Ignatius Church

is the

# Oil Burning Equipment

Architect Chas. J. I. Devlin has specified and installed

**Johnson Low Pressure Air Duplicate Blower Set**

and has protected the owners against failure of the heating plant and has also provided for additional heating equipment from this same oil burning system.

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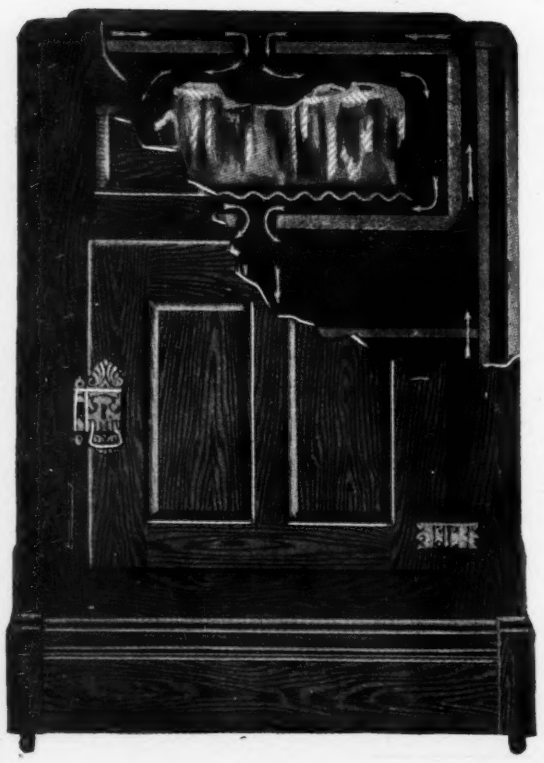

# Alaska Refrigerator

**A Few of the Many Desirable Features:**

**1st.** The **Alaska** refrigerator preserves foods with the smallest possible consumption of ice.
**2nd.** It saves ice and protects it through perfect insulation. The **Alaska** refrigerator is a non-conductor of heat and cold. It never loses through radiation.
**3rd.** It has a perfect cold dry air circulation, adding to the life, flavor, purity, sweetness of every article of food in the various compartments.
**4th.** It is the embodiment of the pure food movement.
**5th.** It is beautiful in design and workmanship.
**6th.** It is made in numerous stock designs, or in special sizes to meet any requirements.
**7th.** It is the result of more than a third of a century of refrigerator experience that has witnessed the sale of over one million refrigerators.
**8th.** It preserves perishable goods at an even temperature of frigidity the year around.
**9th.** It has removable shelves, waste pipe, trap and ice rack.

**ALASKA CIRCULATION**

The circulation of the Alaska Refrigerator is such that the warm air rising from the provision chamber passes up through the warm air flues at each end of the refrigerator to the center of the lid or top, where it falls into the ice chamber through the lid or top flue directly upon the ice, where all moisture is condensed and is carried out of the ice chamber with the water formed by the melting ice. The air then passes entirely around the ice, and is freed from all impurities and moisture, and then falls into the provision chamber through the cold air flue, underneath the ice rack, pure, cold and dry.

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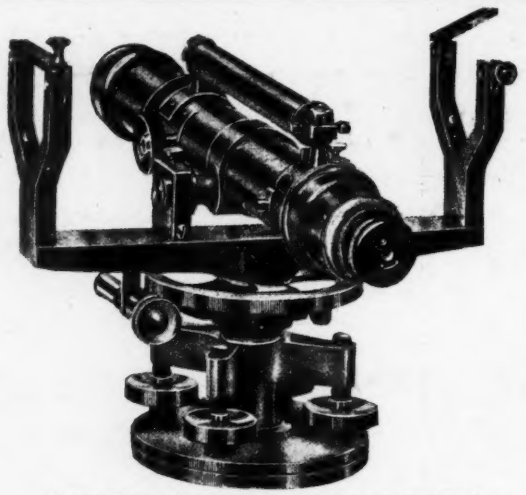

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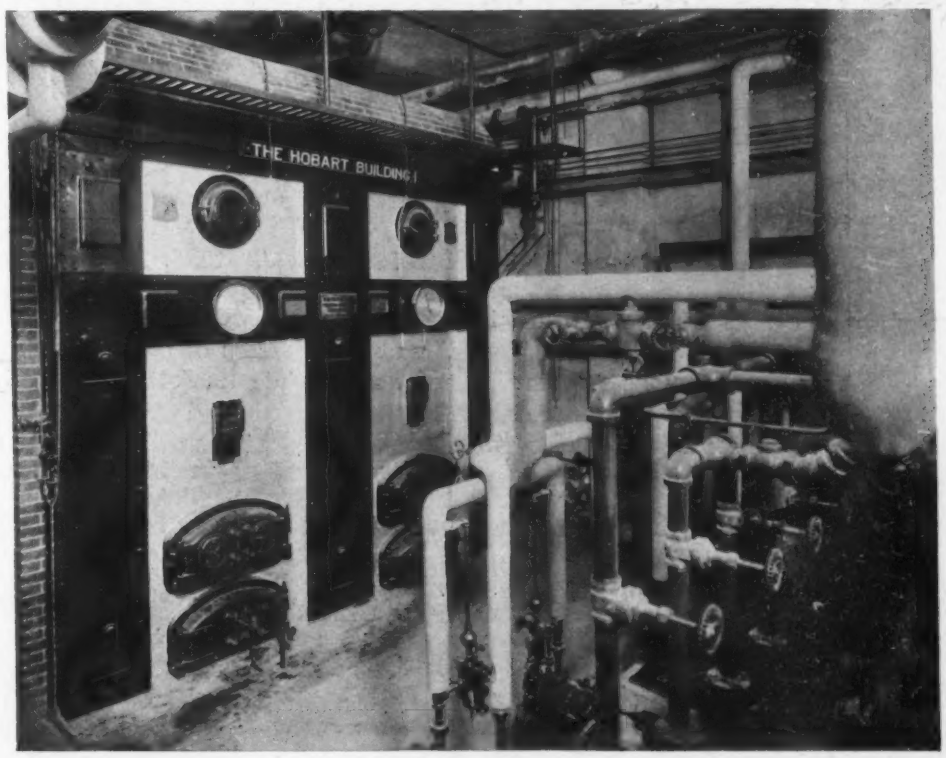


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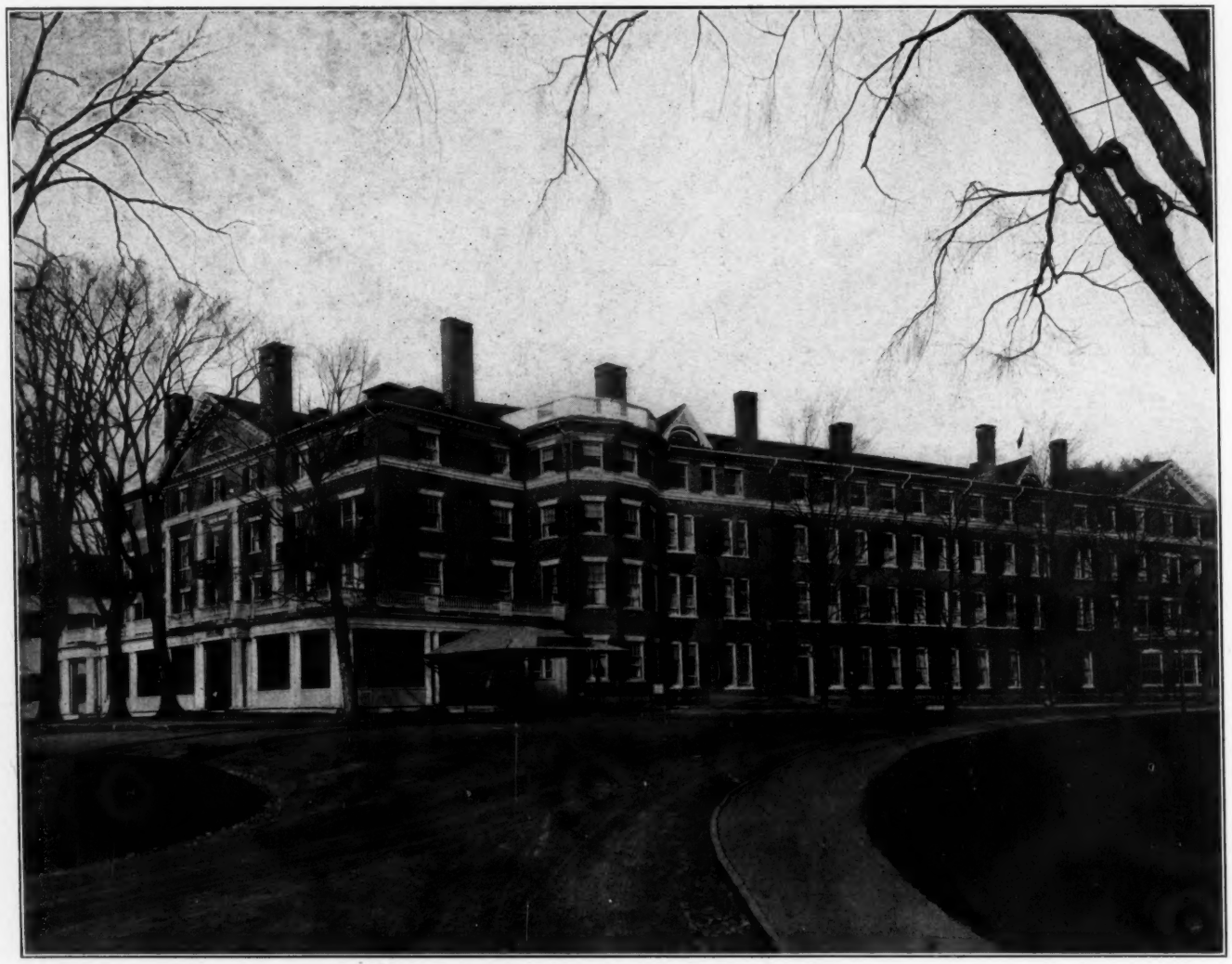

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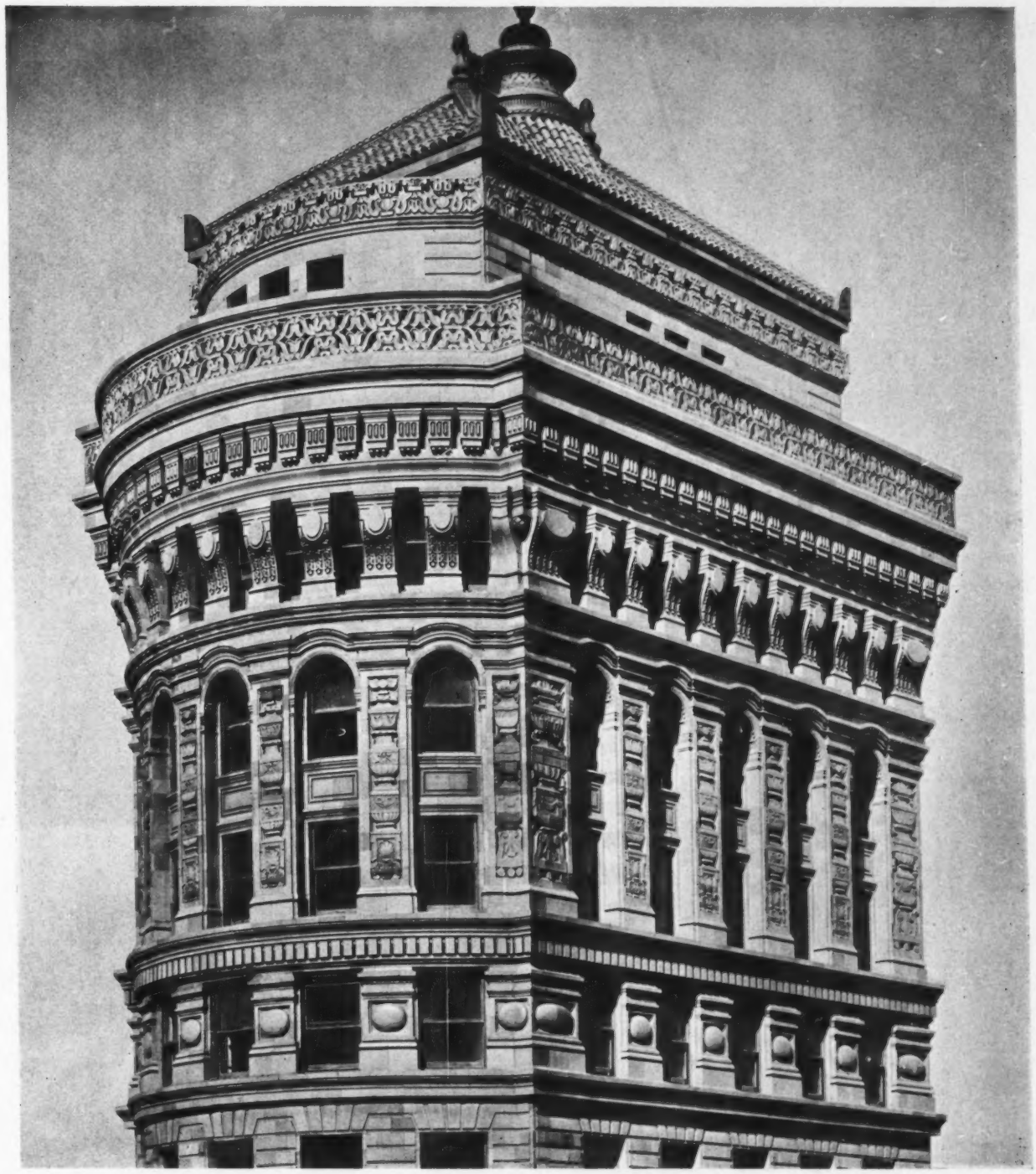

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